From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Vbreault@aol.com
Subject: [16185] 38S TiCK keyer Mandatory Fix confusion
Message-ID: <970331160835_854487596@emout20.mail.aol.com>

I've been lurking on this list for a couple of months as I've been assembling my 38S and getting the parts together to do the mods. I've saved dozens, perhaps over a hundred posts but none of them resolve my confusion.

In his mandatory fix Brad and others say the connection from point (A) on the right side of the schematic diagram to the /C34/R20/U5A/ junction should not be made through R19 but through a NEW 4.7k resistor.

I'm confused because R19 is a 4.7k resistor. I'm certain that I've misunderstood something here. Replacing one resistor with an identical resistor doesn't make sense.

What am I missing here folks?

Val Breault / N8OEF / vbreault@aol.com / HF Mobile on 14.200+/-

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Steve Miller <kg7pv@teleport.com>
Subject: [16143] 38S xtal ?
Message-ID: <1.5.4.32.19970331153012.00676730@mail.teleport.com>

Hi all,
Am making progress in my 38S that was zapped by a failing pwr supply. Need to know what the part # is for the 12.000 xtals. Or if anyone knows what the load cap. is: series or 18pf or 32pf so I can order one from Mouser with the other parts I need. Receiver is working but very hard of hearing and the troubleshooting guide points to a bad xtal filter (noise when you touch U2/1 but not U1/4). Will hear my Tentec into a dummy load and peak with TC1. Thanks

Steve Miller kg7pv @ teleport.com Portland, OR
(CN-85) Norcal #308 QRP-L #109 ARCI # 9230

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Scott Bauer <ke3nv@erols.com>
Subject: [16170] 49er mannual/HW-8, lost email address

Message-ID: <199703311817.NAA04774@smtp2.erols.com>

 Sorry for the bandwidth folks.

 I had promised a 49er manual to a gentleman last week.
Some how, I have lost your email, Name, and address.
You were also inquiring about a HW-8. Please send
your info again so I can get your copy in the mail.

 72, Scott
72&73 de Scott Bauer W3CV, Odenton, MD. grid FM19. Formerly KE3NV
 Fists 1502   QRP Nut SWL Truck Pilot   ARRL
     Current QRP rigs: Green MTN 15 & 17, HW-8, G-QRP GQ-40
 S&S Eng ARK-20, ARK-30, ARK-40, TAC1-80, all Sensational rigs.
                          38 special at 300mw

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: mdwatt@usit.net (Marty Watt)
Subject: [16119] ASCII Version -- 38 Special Construction Manual (very, very long)
Message-ID: <33402e1b.3806014@smtp.usit.net>

Consolidated Construction Manual
38 Special
(a kit by NorCal QRP Club)

(all information here is gleaned from the internet, or
uses the 38 Special Manual as a guide. The copyrights
are retained by their original authors, Doug KI6DS and
Ori AC6AN, and grateful thanks is offered for their
permission to re-write their work)

I ended up frying the IC's in my first 38 Special kit,
and decided to build another. Several of the mods and
problems I encountered left me confused, so with the
goal of building a neat, professional-looking radio, I
decided to develop this construction manual, with the
mods integrated into the construction of the initial
rig. This manual is not a substitute for the original
38 Special manual, only a supplement. The original
manual is well-written, but not idiot-proof. Since I'm
an idiot, I need this "expanded" manual.

Each construction step has potentially several parts.

The first is called "Stock" and relates to those components that are for the stock (unmodified) radio. The mods included in this construction manual are the most stock: the TiCK Keyer, the 5 watt mod using an IRF 510 final amplifier, and the RIT mod. In addition, I've included some mods that I plan to make on my radio, like continuously variable RF Output control, and increased TiCK sidetone. These mods are from the Internet, and have not been tested.

Most people I've talked with seem to indicate the RIT mod to cause more problems than perhaps it solves - the radio seems to be less stable. I don't plan on doing this mod, but added it here for convenience. Other, more "esoteric" mods can be gleaned from QRP-L.

I would recommend one thing, though. If this is your first kit, or if you aren't confident of your building skills, build the radio stock first - no mods, including no 5-watt or TiCK mod. Any modification that involves a trace cut shouldn't (IMHO) be done until the rig is verified as performing "on specs." I'm discovering the hard way that mods have a way of sneaking up on you, and making the process of debugging the radio ever-so-cumbersome. I've also added to the end of this manual Ori's superb troubleshooting guide, and a few of my own notes on debugging my radio, which I hope will be of assistance to the first-time builder/debugger.

If this document provides assistance and enjoyment in constructing the 38 Special, I will have achieved my goal. Ori, Doug, Jim, and the gang at NorCal has provided us with a wonderful opportunity. I hope instead of compensation, that operating the rig will be foremost in your mind, and that you will faithfully QSL every contact made with the radio. That is compensation enough for me!

Marty Watt, KM7W
Jackson, Tennessee

Stock:

Wind the toroids and transformer per the instructions in the original 38 Special manual. Do not install at this time!

(Note: problems in peaking the receiver on alignment seems to indicate a problem with the toroidal transformer, T1. Removal of 1 to 2 turns on the secondary of the T1 transformer seems to solve the receiver alignment problem. Two distinct peaks while adjusting TC1 are a must - if you don't get two peaks, T1 is suspect.)

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5-Watt Mod:

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Wind L101, 27 Turns on a Red T37-2 core.

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Stock:

Install the 12 MHz crystals. There are ground pads provided on the top of the board near the crystals, but I'm not sure if these areas are usable or not. In any event, a short wire from the case of the crystal to ground (somewhere) is required to stabilize the crystal operation.

Stock:

Install the 5 ICs in the places provided. Carefully observe the orientation of the IC sockets with the notch aligned with the notch on the silkscreen. Back ohm ards IC's generally don't work. Socketing the ICs is mandatory, in my opinion, as stability is not affected, and the board is so well-done is doesn't lend itself to unsoldering IC chips.

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TiCK Keyer:

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Socket U6, the socket for the TiCK keyer chip. Note that the chip instructions recommend socketing. Check the orientation carefully! My chip had a notch and a red dot. Per Gary at Embedded Research, the dot indicates the chip type to the manufacturer, NOT pin 1. Align the notch, not the dot!

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Stock:

Install TC1 and TC2, paying close attention
to orientation. The flat side of the
capacitor should match the flat side on the
silkscreen.

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=20

Stock:

Install diodes and transistors, noting
correct orientation (banded end on diodes,
flat side on transistors in TO-92 cases)

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D1 - 1N4007
D2 - 1N4007
D3 - 1N4004
D4 - 1N914
D5 - 1N914
D6 - 1N914
D7 - 1N914
D8 - 1N914 (Note: Do not install if doing 5-watt
mod!)

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5-Watt Mod:

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Install wire jumper in D8.

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TiCK Mod:

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Install VR201 - 78L05 regulator in TO-92
case.

Install TR201 - 2N2222 or 2N3904
transistor in TO-92 case.

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RIT Mod:

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Install D301 - 1N914
Install D302 - 1N914

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Stock:

Install resistors

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R1 - 1.3k ohm brn/org/red
R2 - 1.3k ohm brn/org/red
R3 - 1.3k ohm brn/org/red
R4 - 10k ohm brn/blk/org

```
            R5 - 3.9k ohm  org/whi/red
            R6 - 1.3k ohm  brn/org/red
            R7 - 3.3k ohm  org/org/red
            R8 - 18k ohm   brn/blk/org
            R9 - 10k ohm   brn/blk/org
            R10 - 27k ohm  red/vio/org
            R11 - 6.8k ohm blu/blk/red
            R12 - 2.2k ohm red/red/red
            R13 - 470 ohm  yel/vio/brn
            R14 - 2.2k ohm red/red/red
            R15 - 150k ohm brn/grn/yel    (Note:  Do not install
                                         for TiCK Keyer Mod)
            R16 - 68k ohm  blu/blk/org    (Note:  Do not install
                                         for TiCK Keyer Mod)
            R17 - 2.2M ohm red/red/grn    (Note:  Do not install
                                         for TiCK Keyer Mod)
            R18 - 30k ohm  org/blk/org
            R19 - 4.7k ohm      yel/vio/red
            R20 - 270 k ohm     red/vio/yel
            R21 - 510ohm   grn/brn/brn
            R22 - 390ohm   org/whi/brn
            R23 - 33k ohm  org/org/org
            R24 - 47 ohm   yel/vio/blk    (Note:  Do not install
                                         for "More Audio" Mod)
            R25 - 30k ohm  org/blk/org
            R26 - 30k ohm  org/blk/org
=20
=20
 More Audio:
=20
      Place wire jumper in R24, instead of 47ohm
      resistor
=20
 TiCK Keyer:
=20
      R17 - 270k ohm red/vio/yel for loud sidetone
            560k ohm grn/blu/yel for medium sidetone
            1M ohm   brn/blk/grn for quiet sidetone.

      Leave R15 and R16 open

      R202 - 10k ohm      brn/blk/org
=20
 5-Watt Mod:
=20
      R102 - 220 ohm red/red/brn    (do not install if doing
                                   variable power out mod!)
      R103 - 10k ohm brn/blk/org    (do not install if doing
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variable power out mod!)

R104 - 10 ohm brn/blk/blk (add ferrite bead to leg of R104 installed closest to R103 prior to installation)

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Variable Power Out mod:

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(Note: Some internet users question whether or not this mod drives the final PA too hard. However, all this mod does is allow you to vary the voltage provided to the IRF510 from 0-max with the normal 5 watt mod installed)

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Install 22 k ohm resistor on one end of 50 k ohm pot (any value between 25-100k ohm should be fine)

Solder wire to other end of the 22 k ohm resistor.

Solder other end of the wire to the cathode (banded) end of D7.

Solder wire from other side of pot to top (ground) hole of R102

Solder wire from center of pot to the bottom hole of R102 (where R102 and C102 join). If voltage is maximum when pot is turned counter-clock wise, then reverse the connections at the ends of the pot.

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=20

Stock:

Install disc capacitors, except C7 and C11:

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C1 - 0.01 uF
C2 - 0.01 uF
C3 - 150 pF
C4 - 0.01 uF
C5 - 0.1 uF
C6 - 0.01 uF
C8 - 47 pF
C9 - 39 pF
C10 - 12 pF
C12 - 0.1 uF
C13 - 0.1 uF

C14 - 0.01 uF
C16 - 22 pF
C17 - 47 pF
C18 - 0.1 uF
C19 - 47 pF
C20 - 47 pF
C21 - 47 pF
C22 - 100 pF
C23 - 22 pF
C24 - 0.1 uF
C25 - 0.01 uF
C26 - 220 pF (Note: Do not install for "5 watt" Mod)
C27 - 0.1 uF
C30 - 0.1 uF
C31 - 0.01 uF
C32 - 220 pF
C33 - 0.01 uF
C34 -- 0.001 uF monolythic
C35 - 0.1 uF
C36 - 0.1 uF
C39 - 0.1 uF
C41 - 0.1 uF
C42 - 0.1 uF
C43 - 0.1 uF
C44 - 0.1 uF

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TiCK Keyer Mod
=20
C202 - 0.1 uF monolythic
=20
5 watt Mod:
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C26 - 330 pF disc
Wire jumper C101 (Note: Do not wire jumper if doing variable power out mod)
C102 - 0.1 uF monolythic
C103 - 0.1 uF monolythic
=20
Variable Power Out mod:
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C101 - 0.1 uF monolythic
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=20
Stock:
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Install X2, the 22.118 MHz crystal. Be sure to solder the can to the ground plane via the silver tabs provided on the top side of the

board.
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Stock:
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Install remaining disc and electrolytic
capacitors:
C7 - 47 pF
C11 - 5 pF
C15 - 22/16V Electrolytic
C37 - 22/16V Electrolytic
C38 - 22/16V Electrolytic
C40 - 220/16V Electrolytic
=20
Stock:
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C28 - 820 pF silver mica or polystyrene (Note: Do not
install for "5 watt" Mod)
C29 - 560 pF silver mica or polystyrene (Note: Do not
install for "5-watt" Mod)
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5 Watt Mod:
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You have a decision to make! The original mod
indicates the first set of components. Further
testing has "optimized" the output network at the
second set of values. Something in these ranges
should work - but the second method is supposed to
suppress harmonics and peak power output slightly
better. Choose your values!
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C28 - 820 pF silver mica or polystyrene
C29 - 560 pF silver mica or polystyrene
C501 (on board, C505 on schematic) - 330-560
pF silver mica or polystyrene
OR
C28 - 1000-1200 pF silver mica or polystyrene
C29 - 560 pF silver mica or polystyrene
C501 (on board, C505 on schematic) - 560 pF
silver mica or polystyrene
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=20
Stock:
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L1 - 4.7 uH choke (see freq coverage notes
below - do not install if doing RIT mod!)
L2 - 20 Turns
L3 - 8 Turns
L4 - 12 Turns

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 5 watt Mod:
=20
      L5 - 27 Turns
=20
 RIT Mod:
=20
      L1 - 6.8 uH choke
=20
 Frequency coverage is (by and large) determined by
 the value of L1. Some got better coverage without
 the RIT mod by changing L1 to a 5.6 or 6.8 uH
 choke. The frequency range typically drops lower,
 and can be brought up with the use of a variable
 cap in line with the choke. Other methods involve
 winding a few more turns on the existing molded
 choke, to one end. The new windings are connected
 to the end of the existing choke, and the winding
 is soldered to the board. If the frequency moves
 in the wrong direction, wind in the opposite
 direction. Only a few turns are needed - 5 to 6
 perhaps.
=20
 In my case, the stock frequency coverage was
 10.101 to 10.124. I was pretty happy. 20 kHz is
 about all one can expect out of a VXO without
 creating instability problems, drifting, chirping,
 and other "omygoshwhyisitdoingthis?" items.
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=20
 Stock:
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 Install T1 - insert and solder primary (ends C&D
 per the manual) first, then the secondary (A&B per
 the manual).
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=20
 Stock:
=20
 Install VR1, the 7808 regulator, flat tab to the
 outside of the board.
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=20
 5 watt mod:

      Install TR101, the IRF510 Final PA
      transistor. Pay close attention to the
      information in the manual regarding grounding

the tab - DON'T!
=20
TiCK mod:
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Install TiCK chip into socket.
=20
All mods, trace cuts:
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Pay attention to the manual, and cut the required
PC board traces for the mods you are performing.
=20
TiCK mod, cut trace marked by "2" on the
diagram in the manual.

5-watt mod, cut trace marked by "1" on the
diagram in the manual.

RIT mod, cut trace marked by "3" on the
diagram in the manual.
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=20
Additionally, if you are performing the "Louder
TiCK sidetone" mod, do the following:
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Find the trace that connects C15, C32, and
R19. It is a dogleg trace between U2 and U4.
C32 connects via a "stubby" trace about
halfway on the longer trace between C15 and
R19. Cut the stubby trace (and C32 is thus
cut out of the circuit).
=20
Install a 4.7 k ohm (yel/vio/red) resistor
from the end of C32 you just cut out to pin 6
of U5. This mod puts the TiCK keyer sidetone
into the Audio chain via it's own 4.7k ohm
resistor, rather than through R19/R20.
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Stock:
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Install off-board connections per the manual.
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Tuning pot, 100 k ohm, high end to pad 18,
mid to pad 17, and low to pad 16.
Note that better tuning linearity is achieved
by using an AUDIO taper pot for the 100 k ohm
tuning pot. Linear pots (I discovered) don't

work very well.

=20

RF gain, either a 1k or a 5k pot will suffice, linear taper is fine. High to pad 13, mid to pad 12, low to pad 11.

=20

If installing the RIT mod, you'll need a 10 k ohm pot. High to pad 14, center and low tied together and soldered to tuning pot.

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Variable RF output mod requires a 50 k ohm pot. Installation outlined above.

=20

Key input Stereo Jack, Tip to pad 9, Ground to pad 10 (watch this - the jacks will fool you!) - if installing the TiCK chip, see below, and do not install this jack.

=20

Power connection, positive to pad 3, negative/ground to pad 4. Feel free to add a toggle switch and a fuse if desired, somewhere in the positive lead.

=20

TiCK mod:

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Paddles input stereo jack, tip/dit paddle to pad 6, mid/dah paddle to pad 7, ground to pad 5.

Install the normally open, momentary SPST switch, one end to pad 5 and the other to pad 10.

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=20

Stock:

Place chips in sockets if not done earlier.

Align per instructions. If you do NOT get two peaks of audio when turning TC1, consider taking a turn or two off of T1 secondary until you DO get two peaks. These "twin peaks" are critical to receiver alignment.

If you have installed the TiCK keyer mod, transmitter alignment without a scope is not recommended, but can be done by monitoring the transmitted (dummy loaded!) tone through a general

coverage receiver, and adjusting TC2 for best tone, not necessarily power out. Tune around as well and check for minimal spurs. Most signal spurs are around 9.0 to 9.5 MHz, if at all. Check with a scope at the first opportunity!

Mount in case of your choice.

If something doesn't work, proceed to Ori's "debugging basics" which are included with this document.

ENJOY!

A Debugging Primer (by Ori, AC6AN)

This text describes the basic troubleshooting procedure for the "38 Special" transceiver. There are different levels of tests possible, depending on the test equipment on hand. In an attempt to simplify things, this text concentrates on the basic tools available to most potential builders of the kit. Brief references to more advanced tests are also included where appropriate.

General "dead" Transceiver Procedure

(1) Apply power briefly and touch all ICs. None should be more than lukewarm. Anything else and you have a problem around the "hot" chip.

(2) When any part of the design is suspected "dead" the first step is to test all power supply connections (referenced to ground):

(a) 12V at the power connector
(b) 8V at all ICs as follows (IC/pin): U1/8, U2/14, U3/8, U4/20, U5/8

(3) Other DC voltages:

(a) verify about 4V at U5 pins 3 and 5.
(b) check the base of TR1 (2N3904, middle pin) as follows:
    about 0.6V on receive (key open)
    about 1.5V on transmit (key down)
(c) check U2/12, U2/13, U4/1, U4/13, banded side

of D6:
8V on receive (key open)
0V on transmit (key down)

(d) check U2/5, U2/6, U4/7, banded side of D1 and D2:
5V on receive (key open)
8V on transmit (key down)

(e) check DC voltage on banded side of D3, while varying the tuning pot position for 0-8V voltage range. Any problem with the DC voltage levels mentioned means you have something wrong in that area of the board. These tests can be done even with a cheap analog voltmeter.

(4) Verify sidetone with key down. If you hear the sidetone then the audio stage is OK and most likely U4 is not faulty. In general, we found that the ICs are very rugged. Do not remove an IC from the board before you have verified all components around it first!

Basic Receiver Tests

It is assumed that the DC tests checked OK.

(1) First test that the headphone jack is compatible with the socket.

(2) You should hear the sidetone with key down. This tells us that the audio amp circuit (U5) is functioning.

(3) If no sidetone heard, the audio amp might still be OK:
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(a) Listen with the headphones while touching different places in the receive path with a metalic object (screwdriver, etc.). You should hear some noise in the headphones (possibly you'll pick up a local AM station, due to the high gain):
U5/2, U5/6
U2/10, U2/11, U3/4
U3/1, U2/2
U3/6, U3/7 (both are part of the 12.0 MHz oscillator)

U2/1
U1/4 (if U2/1 was OK and this one is dead, then check the crystal filter)
U1/6, U1/7 (both are part of the 22.1 MHz oscillator)
U1/1
banded side of D1 and D2
antenna connector (center pin)

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The above procedure tests the receive chain "back ohm ards". If you stop hearing at a particular point, check the circuit in between that point and the previous ("good") point.

(4) If you have a general-coverage receiver, "listen" to the 12.0 and the 22.118 MHz oscillators around those nominal frequencies. Use a short wire for the antenna of the test receiver and place it close to the "38 Special" board, while applying power. Check that the 22.118 MHz signal varies when you change the position of the tuning pot. Check that the 12.0 MHz moves down about 600 Hz with key down vs. key open. This step verifies that the oscillators are functioning correctly. This step can be also executed with a scope and a frequency counter (make sure the probe is not too capacitive).

Basic Transmitter Tests

It is assumed that the DC tests checked OK.

(1) You should hear the sidetone with key down, assuming you verified that the audio amp is functional. Lack of a sidetone may mean that the sidetone circuit is faulty or that U4 has some problem. Do not remove U4! Check all other components around it first.

(2) With a general-coverage receiver, you should hear a carrier around 10.110-10.130 with key down. Tune the transmit trimcap TC2 and scan that range with a short wire as an antenna on the test receiver. You should use a 50 Ohm load for the "38 Special" for this test. In general, the sidetone on a stock kit will sound harsh when it's not tuned

correctly, so this should be used as the first indication of correct transmitter tuning.

(3) Verify that the oscillators are working correctly, as described in the previous section (basic receiver tests). The correct operation in receive mode is satisfactory.

(4) All other transmit chain tests require a scope. Signal levels in the transmit chain are viewable on all scopes (at least 100 milivolts p-p) and should be easy to trace. You should be looking for a clean sinewave at the base of TR1 with key down, and check for about 2.5 p-p swing on its collector. On the dummy load at the antenna connector you should see a few volts p-p swing and very clean sinewave at the 10.110-10.130 MHz range.

(Editor's note: the Base of TR1 can be measured at the junction point of R10 and R11. Collector measurements can be made at R12, Emitter at R13)

More detailed description of signals is beyond the scope of this basic debugging procedure, and may appear in a future article.

72 es 73 de=20
Marty, KM7W

Jackson, Tennessee e-mail: mdwatt@usit.net
http://www.public.usit.net/mdwatt
"The Curmudgeon's Corner"
NorCal #???? - ARCI #7514 - QRP-L #953 - AK/QRP #098 - Grid EM55oq
~~~~~~

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Stanley Wilson <microres@crl.com>
Subject: [16144] BPSK generator Re: QRP Inflection Point
Message-ID: <Pine.SUN.3.91.970331072555.26182B-100000@crl2.crl.com>

As a result of my e-mail message about a "QRP Inflection Point" I received several messages wanting to know how to get on the BPSK mode.

For receiving build the Sigma-Delta circuit from QST/Jan 92 designed
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by VE2IQ. You can pick up the software (Coherent version 6.0) from his web page. http://w3.ietc.ca/home/bill/bbs.htm

For transmitting you will need a BPSK generator.
The output of the generator should be fed through a low pass filter then to the mike input on your SSB transceiver.
The generator operates at 800 hz.

The the bpsk generator circuit is as follows:

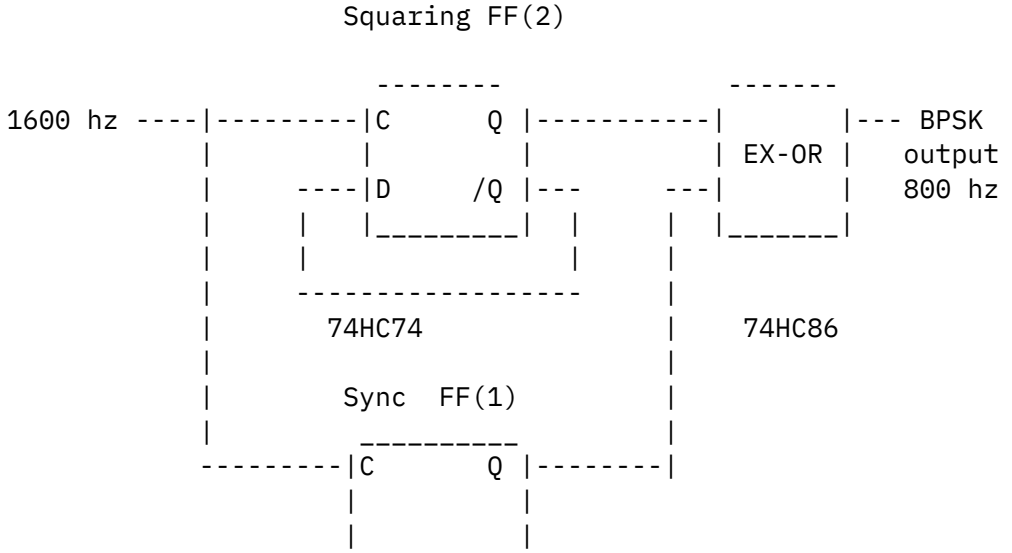
Osc/Divider circuit - I used a 74HC4060 cmos divider with an internal osc. The xtal required is a 6.5536 mHz series resonance available for about a dollar. The output on pin 1 of the 4060 is a pulse at 1600 hz. I used this signal for sync and also fed it to a squaring FF(2) to obtain a nice signal at 800 hz. (Xtal Digikey XO18-ND)

The actual BPSK signal is generated with a EX-OR circuit 74HC86.
The output of the EX-OR is a square wave at 800 hz.

Sync FF(1) - I chose to sync the data with the clock. I wanted the carrier to be coherent with the data pulse.

I found the osc circuit in the 74HC4060 to be voltage sensitive. So I add a 78L05A for regulation of the power buss of the BPSK generator.

Results: I have a nice square wave with a time period of 1250.07 usec from the 74HC86. The data is in sync with the zero crossing of the 800 hz carrier. Not bad for a couple dollars in parts. I am running the output through a w3nqn passive filter (arrl handbook). Once you get a decent looking output it can be feed into the S-D circuit for testing since Bill ve2iq software is full duplex.



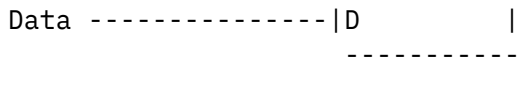


Figure 1. BPSK Generator (800 Hz) with Sync

For receiving you can build the circuit from the QST article or purchase a kit from VE2IQ. It takes about $20 in IC's and can be built on a RS vector board. I think Bill currently gets about $50 for a kit with a nice etched board and instructions. Software is free on his web page.

A plus with ve2iq's circuit, If you run the FFT.zip program (also on the web page) and if you have only noise input to your receiver you can geta plot (PC-CRT) of your IF bandpass filter , etc.

You should have a 368 machine with 20 mhz although some use a smaller or larger PC to run the software (Coherent V6.0).

Have fun - The above can easily be built and tested on a weekend.

Cheers, de Stan AK0B

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [16126] Cheapest AM radio you can get
Message-ID: <199703310626.GAA21240@chuck.dallas.sgi.com>

Gang,

Get out the 'Data Book for Homebrewers and QRPers'
by our fellow member Paul Harden, NA5N. Turn in
your hymnal to page .... Oh drats, no page numbers.

OK, go look at the LM386N data sheet about 0.5218th
of the way through the book. :-)

Down at the bottom of the page is a 'typical application'
schematic for a 46dB audio amplifier. In playing with
the Pixie 1, 2, and W1FB version and the Super Pixie
I prototyped this thing up on a breadboard.

You don't need anything connected to pin 3. What I was
doing was writing up the assembly instructions for the
Super Pixie and was thinking about the individual(s) that
don't have a scope, audio generator, etc. and figuring

out how you would check to see if it working.

By clipping a test lead to pin 1 or pin 8 I was able to hear very loudly KRLD radio here in the Dallas/Ft Worth area. I learned a lot about some legal issues that were being discussed on a talk show run by two lawyers. The age of news stations and talk radio.

This little circuit had enough drive to hear the earphones clearly across the room, so make sure that you put in the R1 variable on the input for a lot of applications.

Couple of things that I found and would like others to confirm (or disagree if you find out differently) is:

1. Pin 5 is the output pin number (that is a given).
2. Change R2 from 100 to 200 ohms. I found no difference in the output, but current to LM386 went from 44 mA down to 33mA (on the average) with 200 ohm resistor. W1FB shows a 1K, but I didn't like that value at all.
3. Pin 2 is the + input and pin 3 is the -. Pin-out diagram in the NA5N book shows it correctly, but the functional circuit diagram and the typical application diagram are showing minor differences. Paul will fix this in the next revision of the databook.
4. C4 at 10uF is a good value for CW and SSB work as noted by Paul
5. C4 and C3, both electrolytics may be used as shown or reversed. Polarity doesn't come into play for this application.
6. R3 and C5 combo made the output less distorted at high output levels.

So, if you have a group of kids or beginners that want an instant radio, here is your answer. Less than $2 or so worth of parts, a $30 prototyping board, and Sony earphones and you are up and running. :-) And about $10 for the Gel-cells. It's the little things that add up, don't they? (LM386 is $0.95 from Digi-Key and $0.59 from BG Micro and the 1,000 PN2222 NPN PC lead transistors for $20 from BG Micro are house numbered but they are good transistors)

Ooops, Phyllis just came in to see what the noise was. "Honey, that's right. It's coming from that mess of wires that I have on this board here on the top of the desk, which is a mess, but it'll be gone by the

end of the week. I'm designing and building my own
radios so that I can save a lot of money by not buying
them off the shelf like everyone else. Look a complete
transceiver for less than $25!!" -- "What? No, you're right.
I didn't count the price of the scope, RF generator, the
gel-cells, the charger, the protoboard, the life time
supply of parts, the books, the club dues, Dayton trips,
the keyer, the paddles, the cables, the antenna(s), but
I am impressed that you know what all this stuff is now."

That's not what happened but we can all see what
reality is with this hobby.

The point here is, change R2 to 200 ohms. W1FM shows
1K for R2, but I found that caused considerable distortion
in the output and a reduced output power to the headphones.
Circuit runs on 9V or 12V.

For those having problems with the little rigs, like the
Pixie, with local AM BC stations being received I'll bet
it may be the LM386 circuit. I'll also write up later
on the web page a thing about mixers and non-sine wave
LO effects. This is taking some time so hold on. This
is going to be a long article, but hopefully this will
help fill in the why and how issues for many listeners.
So if some xcvr's are not in a case you will have a good
chance of receiving additional signals not wanted or
desired.

FYI
Chuck Adams K5FO CP-60 adams@sgi.com
http://reality.sgi.com/employees/adams_dallas/
WIMPS: Qs=000 30m=0 17m=0 12m=0 States=00/00/00

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Dick Schneider <rschneid@ix.netcom.com>
Subject: [16125] CQC ANNOUNCES NEW CONTEST!
Message-ID: <333F55FD.3943@ix.netcom.com>

--FROM THE CQC BRAIN TRUST---

CQC ANNOUNCES TRUE FIELD DAY

The Colorado QRP Club, Inc., announce an "emergency contest" which is
intended to get back to the original principles of Field Day.   It will
test your ability to engage in emergency communications, and the lack

of notice is deliberate. It is not a contest, it is an exercise. We've gone to great lengths to insure that the event is fair to everyone, and the cash prizes for once will go to people who need the money, rather than those who have invested big bucks in their antenna farms.

All logs are to be sent by email to the address shown at the end of this message, and results will be posted to the List as soon as possible.

CONTEST: CQC TRUE FIELD DAY

PERIOD: 1 APR 1997 2400-2459Z

Participants may select any continuous 2 hour segment within the overall contest period.

CONTEST CALL: CQ CQC 41

BANDS AND MODES:

Any band and mode for which you are legally qualified. WARC bands OK, because this is not a contest. Other operators may be worked multiple times so long as at least 30 minutes have elapsed between contacts. Internet and land-line contacts are allowed as long as valid exchange is received. Contacts on 11 meters are OK but not encouraged.

EXCHANGE:

R/S/T (OR R/S, OR R), SPCDAC, Middle initial ("NMI" if you don't have one), and favorite brand of beer. EXAMPLE 5/9/9 CO G BUD, or 5 303 NMI COORS WINTERFEST

SCORING:

BASE QSO POINTS: 10 for each QSO. ADD 10 points if other op reports the same beer. ADD 25 points for each Internet QSO which included an exchange of images. SUBTRACT 20 points for each QSO with a broadcast station. SUBTRACT 10 points for each telephonic QSO which resulted from a "wrong number."

MULTIPLIERS:

Multiply your total QSO points by:

-Unique SPCDACs (state/provice/country/domain/area code).

-The number of batteries used (cell phone batteries and the back-up

battery in your PC can be counted)

-Antenna factor which is calculated as the height of your tower in feet times the gain of your antenna system, multiplied by minus 1.

-Auxiliary power factor which is calculated as the net value of pure alcohol consumed during the event in cubic centimeters. (For non-drinkers, multiply by the total number of 8 ounce cups of coffee consumed. Water drinkers are out of luck.)

-Skill factor 1/n where n is the number of years you have been licensed to drink, drive, or operate ham radio equipment, whichever is the larger.

BONUSES:

After you have calculated your raw score by multiplying your QSO points by all relevant multipliers, add the following bonuses if you have qualified for them.

1000 points for working yourself (e.g. using 2m repeater phone patch to call yourself on the phone).

10,000 points for working the CQC club station, W0CQC, which will be operating from the Hale Bopp Companion Starship.

100 points for an e-mail QSO with Wayne Green or Wayne Newton.

LOG SUBMISSION

Sign a statement to the effect that you are natural person residing in the U.S.A. or some other country, are legally qualified to operate at least some of the equipment used in the contest, and that you have abided by the rules and spirit of the con--er--exercise. Submit completed and certified logs via e-mail to: chairman@fcc.gov.

CU on the Air!

72/73 From the Colorado QRP Club

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: n0acs@juno.com (John R. Morris)
Subject: [16123] CRYSTAL GROUP BUY
Message-ID: <19970330.231915.5463.25.N0ACS@juno.com>

UPDATE from John,
Well I've received 35 orders since posting this offer and they still keep coming in.

I've been asked several times about a 5 pack for the Extra frequencies so I have decide to add one to the offer;

Extra 40 mtr. pack of 5 crystals: 7005 7010 7015 7020 7025 @ $24.00 Postpaid

Also I have had a number of orders for crystal packs and also requesting to order additional crystals for the 40 mtr. AM frequencies. I have advised on these that I will honor orders for any additional crystals for the AM frequencies at the $4.80 each crystal price and include them in the shipping.
So if any of you desire to take advantage of this additional offer let me know.

I want to thank Conrad for posting the offer to the Glowbugs, and whom ever it was that sent it to boatanchors and something called the Heathkit list.

I want to thank each and all of you for your support in committing to orders, and hopefully I will reach the 75 minimum within the next few weeks. Until then

73 John

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: n0acs@juno.com (John R. Morris)
Subject: [16147] CRYSTAL GROUP BUY: UPDATE
Message-ID: <19970331.095111.5471.0.N0ACS@juno.com>

Hi Gang,
     Bowing to pressure from a friend of mine in Kansas City, I'm going to offer the QRP-L a group buy on FT-243 crystals for the month of April.

Here's the deal: Extra 40 mtr. pack of 5 crystals: 7005 7010 7015 7020 7025 Khz. @ $24.00 Postpaid

General 40 mtr. pack of 5 crystals: 7030 7035 7040 7045 7050 Khz. @ $24.00 Postpaid.

General 40 mtr. pack of 7 crystals: 7030

7035 7040 7045 7050 7055 7060 Khz. @ $33.60 Postpaid.

Novice/tech. 40 mtr. pack of 5 crystals:
7105 7110 7115 7120 7125 Khz. @ $24.00 Postpaid.

Novice/tech. 40 mtr. pack of 7 crystals:
7105 7110 7115 7120 7125 7130 7135 @ $33.60 Postpaid.

That's a 20% discount off the regular crystal price of $6.00 each plus $2.00 in postage.

In order to offer this pricing discount I need at least 75 orders. If you'd like to take advantage of this special offer e-mail me at n0acs@juno.com

Since I've had numerous requests for a package of crystals for the Extra class frequencies I have added the Extra 5 pack listed above.

Also I have had orders with additional requests for xtals for the 40 Mtr. AM frequencies. I have advised to those wishing to order the additional crystals to add $4.80 per crystal ordered, and I will include them in the prepaid shipping. This offer I am extending to any of you that desire to order the extras.

Thank all of you for your support, and thanks for the orders.

Thanks, John Morris N0ACS

Forward mail to this address:
Phoenix Crystals
1714 North Ash Street
Nevada, MO 64772

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: mike@krypton.nmr.Hawaii.Edu (Mike W. Burger)
Subject: [16204] CW speed
Message-ID: <9703312347.AA10991@krypton.nmr.Hawaii.Edu>

The two most marvelous tools for CW improvement I have found, which carried me through the extra ticket and finally broke my 18 wpm code barrier, are the computer program Morse Tutor Advanced and the MFJ 493 Super Memory Keyer with Keyboard interface.

Morse Tutor Advanced allows input via ASCII text files. I wrote several C

programs for my IBM at home (source code available on request) which create two types of text files. One is random length cypher groups using any alphabet with any frequency distribution for individual characters. The second uses a list of English words and phrases as input and generates messages consisting of words and phrases at random.

The MFJ keyer has 32 Kbytes of storage. You can load text files up to 4 Kbytes into each of eight message memories and play them back at the touch of a button. I keep it next to the bed with special files loaded that have short English words, common words, Ham abbreviations etc. and I copy one or two in the dark, in my head, while getting ready to go to sleep. The keyer has an audio out so it can be loaded up and used to record practice tapes. It has a QSO simulator that I have yet to get to work correctly.

The MFJ has a serial port on it. To practice sending with the paddles, you can hook it to a terminal program and get the entire grizzly truth on how absolutely horrid the mess you are producing actually is. The keyer inserts a single space when it judges that one wordspace time has gone by so it is a strict taskmaster. Stuggling to get the characters appearing on the screen to look like typing is a real challenge.

This weekend I discovered another fabulous feature of the MFJ keyer. It can be loaded up with a nice CQ message and send it over and over again at the push of a button while you are trying to find anyone on the QRP calling frequencies. Saves huge amounts of wear and tear on the wrist and encourages persistance.

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: QLF%mimi@magic.itg.ti.com
Subject: [16183] DF BEARINGS, FLIGHT LINES, ETC, ETC, ETC, ETC, - - - - - -
Message-ID: <9703312021.AA16090@itg.ti.com>

From: Brad Bradfield   QLF

Subj: DF BEARINGS, FLIGHT LINES, ETC, ETC, ETC, ETC, - - - - - -

Y'all wrote:

>Ya know joe, I've got a box full of DF Bearings that
>I got when we took down a radar site in Maine... maybe
>I could use them to rotate my MMA Vertical to change
>the pattern... hmmm

>If it works out OK, I probably have enough to go around

>too! Keep you posted.

>Tim W5FN

>>BTW, Tim's mention of the AFB just reminded me. Back
>>when I was in the military, I had access to surplus
>>military flight line. This is the *best* wire I've
>>ever used. If you know anyone who can get some, get
>>a few hundred feet. Don't know why you can't get it
>>commercially. Real shame.

>>Cheers de AB7TT,

>>-Joe Gervais-Poisson, vole@primenet.com, AZ ScQRPions (Phoenix)

>>"It was the monkeys! The monkeys did it!"

You guys are all nuts. All of us Sailors (It is properly capitalized, you know.) know that shore line is the best stuff around! Refuses to corrode, stretch, or otherwise degrade when used in antennas. Radiation efficiency near 133%.

(Now Boot, if you miss that mail bouy. the Captain's going to be mighty unhappy!)

(Sea bats! We caught a sea bat!)

Oh, well.

72's es 73's,

Brad, WB0CGH (Retired Navy Chief)

****
Brad Bradfield, PE   Electrical Design Engineer
(H) 817-321-2960   Texas Instruments, Inc.
(W) 972-462-6230   (Soon to be: Raytheon/TI Systems)
                                   Real men talk with their fingers!
QLF@MSG.TI.COM
WB0CGH@WO5H.#DFW.TX.USA.NA
ARRL Life Member   QRP-L #377   SMIRK #4906   IEEE(M)   ARS #72
Collector of wireless and landline Morse keys and accessories.
****

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Brad Mugleston <bmug@gwl.com>
Subject: [16179] Digest/HELP
Message-ID: <01BC3DD5.3CCB0E00@pps-pc10.gwl.com>

Oh, listserver GODS,

I need help, For some reason I have not been getting my Digests. I am missing 676, 678, 679 and 680. I got 675, 677 and 681 so the system is kind of working. I did request these with the GET command this morning (about 5 hours ago) but nothing has shown up yet.

I need my fix - I don't know if I can take it live (I don't get enough work done the 12 hours I'm here everyday as it is) but I will go live if I have to.

Thanks

Brad

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: k4wz@juno.com (RON L TODD)
Subject: [16131] DX VK6FOC
Message-ID: <19970401.072200.4599.2.k4wz@juno.com>

VK6FOC ON 10.105 CALLING CQ NOW...WORKED WITH 5 WATTS
QSL VIA DJ8FW
12:15Z NOW

RON TODD K4WZ ex AE4LQ, KE4RZR, WA4EPC
K4WZ@JUNO.COM OR K4WZ@WORLDNET.ATT.NET
FISTS #2109, ARCI # 9273, QRP-L # 924 ARRL LIFE MEMBER
FT-1000D, QRP+, HOMEBREW TEN-TEC 40 M, PIXIE2.
ANT. C4XL UP 100 FT. 80 M LOOP UP 45 FEET

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
Subject: [16137] DX VK6FOC
Message-ID: <970331140456_70511.3041_IHD80-1@CompuServe.COM>

Ron:

I concur!--he has been there at least 3 days in a row. Have worked him two days, with power level down to 1 watt into a windom. Strange that he has to call CQ so much. He is 57/89 here in Rochester, MN.

Go *get* him, everyone. Nice DX for you.

72/73,
--Doc/K0EVZ qrp-l 861 mn-qrp 19 nj-qrp 69 ak/qrp 139 norcal cqc arrl

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Len W. Touth" <len@infinet.com>
Subject: [16132] EASTER BEACON STATION SUCCESS!
Message-ID: <199703311244.HAA29686@mail1.infinet.com>

Hello Gang:

Here is a synopsis SO FAR of stations that have reported to me the copy that they received from the EASTER BEACON from the Columbus QRP Club (50mw to windom dipole up 30)

SUCCESFUL COPY STATIONS
KQ6FR KR0I WA9PWP K5ZTY WA1QVM N2JJ
N1QQV K4NK AC5AM K8NU N47OX

THE ABOVE STATIONS RECEIVE A SUCCESFUL BEACON COPY CERTIFICATE - CONGRATS!

BEACON WAS RECOGNIZED BUT NO CLEAR COPY (VERY LITTLE COPY) BY
KA7YOU WB2VOU

THE ABOVE STATIONS RECEIVE A BEACON RECOGNISED CERTIFICATE

I AM STILL WAITING TO HEAR FROM MANY OTHER STATIONS THAT WERE ATTEMPTING COPY BUT HAVE NOT YET LET ME KNOW WHAT THEY WERE ABLE TO HEAR.

THANKS FOR ALL WHO TRIED! CU DURING MEMORIAL DAY WEEKEND WITH A 25MW BEACON!

Best 72/3
Len
KG8SF
len@infinet.com KG8SF@key.com

QRP-L # 841 CQrp # 2 ARCI # 9025 FISTS # 2134

HF Digital Communications - CW/Pactor/G-Tor/RTTY/Amtor
CHARTER MEMBER - THE COLUMBUS QRP CLUB - *CQrp*
Web Page: http://www.infinet.com/~len
QRP Homebrew Rigs = OHR 400, S&S TAC-1, NORCAL 38S, SWL GM-15,
Kanga Any Band Xmitter, Bare Essential 50c5 Xmitter

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: mdwatt@usit.net (Marty Watt)
Subject: [16200] Editor's remarks in current QQ
Message-ID: <33403c75.73025794@smtp.usit.net>

The current issue of QQ arrived today ... man, what a nice job guys!

Ron, wonderful job! You raised a point in the editorial about code speed, that I think could be the start of a nice discussion.

The quote was: "In life outside amateur radio, you must first have the skills needed for the job to be done. ... If you want to be in the top ten listing of one of the major CW contests, you need to get your speed up!"

Now, I agree 100% with the sentiment and particularly the analogy. But there is a delimma contained in that analogy that also applies.

How does one get the experience to qualify for a level that demands previous experience?

This holds true in amateur radio as well -- how does one develop the skill and confidence necessary to achieve a high competency at CW when you can't find signals on the band to work?

I'm becoming acutely aware of this, having been licensed as an extra

class in 1990, and returning after a 5-year haitus. My code speed sucks. Well, perhaps I'm better than I think. Maybe it's confidence.

Ron mentions TR Log's contest trainer as good CW practice. What about on the bands? It seems, in listening around a bit (and a very little bit at that) that speeds tend to congregate around 10 wpm and 25+ wpm. My nerves prevented me from copying a lot of signals at 10 wpm, and I didn't even have the piece of mind to offer a "QRS"!

Perhaps I'm not perceiving the question properly, and I'm certainly not the person to be commenting on this. I'd LOVE to hear from the novice/tech+ among us as to how on-the-air operating has improved their code speeds and perhaps how they feel the "improvement" issue can best be addressed for the rest of us.

My goal is to be *competent* at 30 wpm by year's end. Since tomorrow is April 1, and I'm solid around 10 wpm now, hopefully this goal is realistic.

Considering that operating time at my end is limited (my shack is the kitchen table, and the antenna is only 15 ft up!), what other techniques can I use to improve my receiving skills? Sending will, I believe, take care of itself.

BTW, I believe one thing that will help is to begin demanding some free novice-class, power limited frequencies on an Amateur-exclusive basis world wide. 40 is popular, but very, very difficult for novices (and anyone else for that matter) to use. We need that worldwide allocation from 7.0 or 6.9 to 7.3 or 7.2. Clear the novice band segments, I say! Give them a chance to *hear*, *copy* and *improve*!

Again, Ron, really nice job and an excellent editorial, which I agree with 100%. My only question is -- "how?"

72 es 73 de=20
Marty, KM7W

Jackson, Tennessee e-mail: mdwatt@usit.net
http://www.public.usit.net/mdwatt
"The Curmudgeon's Corner"
NorCal #???? - ARCI #7514 - QRP-L #953 - AK/QRP #098 - Grid EM55oq
~~~~~~
~~~~~~

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: David Adams <adamsclan@netgate.net>
Subject: [16155] Ersin Multicore Solder
Message-ID: <333FECE0.761F@netgate.net>

Does anyone know anything about this stuff? It is 63/37 and made by
Multicore Solders of NY, NY. No other indications of what the flux core
is made up of other than the term ersin (no recommendations not to use
it on electronics though...)...anyone heard of it?

73 de dave, n9uxu

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Tj Johnston, N4UYQ" <tjohnsto@erols.com>
Subject: [16113] First QRP rig for Novice/Tech
Message-ID: <3.0.1.32.19970330203646.007d6600@pop.erols.com>

That 38 Special sure sounds good..... now what do you have for us
Novice/Techs???
The 40-9er is not available anymore.... any 80m,15m, or 10m QRP monobanders
like the 38 Special available??? Mods for the 38 Special to Novice/Tech
bands???

72/73,
         Tj Johnston, N4UYQ (Tech+) QRP-L member #1057
            formerly KA4GVW (Novice)
         Ashland, Virginia (Hanover County) FM17
         Richmond Amateur Telecommunications Society
         http://www.rats.net

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Jack Mc Kie <mjmckie@frontiernet.net>
Subject: [16187] FS. Argosy 525 $325
Message-ID: <199703311919.OAA55620@node1.frontiernet.net>

I have an Argosy in fair cond except that 30 meter output doesn't work
(receives ok).   Please respond via e-mail outside list.

73   Jack Mc Kie   KC2BBW

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: mdwatt@usit.net (Marty Watt)
Subject: [16199] FS: Telex Headset
Message-ID: <334140da.74151001@smtp.usit.net>

I have a Telex headset with boom mike, model 62400-155 (the Contester). It's 5 years old, barely used (prob. less than 6 hours, none on the microphone!).

New was $95, I'm asking $45 (I ship).

E-mail only if interested.

72 es 73 de=20
Marty, KM7W

_____
Jackson, Tennessee e-mail: mdwatt@usit.net
http://www.public.usit.net/mdwatt
"The Curmudgeon's Corner"
NorCal #???? - ARCI #7514 - QRP-L #953 - AK/QRP #098 - Grid EM55oq
~~~~~

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "W. D. Lindsey" <70511.3041@CompuServe.COM>
Subject: [16194] FS:TenTec ARGO 556
Message-ID: <970331221618_70511.3041_IHD42-1@CompuServe.COM>

Gang:

After much consideration, I have decided to part with my beloved TenTec ARGO 556. This is a great rig, having worked 31 countries and 48 states QRP in the six and a half months since I bought it brand new direct from the factory. The problem is that I simply am moving more toward HB and kit-built gear, and need funds.

The rig is in absolutely pristine condition. It has never been operated outdoors or in field settings. In fact, it was recently completely gone over and tweaked by TenTec themselves.

Here's what I am offering: the basic rig, plus band modules for 80, 40, 30, 20, 15, 12 and 10 metres. It also has a factory-installed noise blanker, and comes with a microphone. As is well known, the rig has one of the best QSK's in the business, and includes a built-in keyer with adjustable front-panel speed control.
~~~~~

The nominal output is 5 w CW on all bands, but even this can be lowered if desired. The band modules permit *full coverage* of each band, not just a slice. This is clear from the bottom of the respective band clear through the top of the SSB. (10 metres uses a switch on the module.) The receiver is extremely sensitive and selective, truly a joy to use.

Asking price = only $530.00. This price includes UPS shipping anywhere in the continental USA.

If interested, please contact me via private e-mail. If you would like to discuss it in person, please include your phone number(s) along with the best time of day to call you.

TKS es 72/73,
--Doc/K0EVZ qrp-l 861 mn-qrp 19 nj-qrp 69 ak/qrp 139 norcal cqc arrl

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "John A. Evans - N3QOO" <jaevans@cos.cst.titan.com>
Subject: [16149] FSFM for Colorado - 1 April
Message-ID: <199703311615.LAA68301@nss2.CC.Lehigh.EDU>

Greetings,

  I sent email to Mike volunteering for Colorado to help Marshall out, but I guess his connectivity woes either dumped my email to him or he is still swamped with catching up.

  In order to meet all the digest folks' needs, here is my volunteer statement and schedule for 1 April. Listen for N3QOO !!!!

0000Z-0200Z   30m   10.115 +/-   HW-9

0200Z-0400Z   40m N/T+7.113 +/-T-T Argo 515

Antenna - 300 ft doublet up 55 feet, fed with ladderline.

  Mike, add me to your list if there is room, or spank my hand if this is a big foopah !!

72 de n3qoo - john

John A. Evans   Chief System Administrator
Office: (719) 528-1800 x164   Titan Client/Server Technologies

Fax: (719) 528-1275   1115 Elkton Dr, Suite 200
email: jaevans@cos.cst.titan.com Colorado Springs, CO 80907-3535

Norcal #262 QRP-L #219 QRP-ARCI #8303 NE-QRP #213 CQC #045
CQrp   #15   NJ-QRP #50   AK-QRP   #52   NW-QRP #454
Personal Web Page: http://www.geocities.com/capecanaveral/9773/

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "John A. Evans - N3QOO" <jaevans@cos.cst.titan.com>
Subject: [16175] FSFM for Colorado - 1 April - N3QOO's sked/freq
Message-ID: <199703311904.OAA28160@nss2.CC.Lehigh.EDU>

Hi again,

  Just for the record, I do not want to step on Marshall's toes at all
tomorrow, so I give him first crack at the official frequency of 10.115, =
=20
especially since my HW-9 will probably swing wider than most 38s rigs.
I will listen for Marshall and shift off his frequency for the 30M =
skeds.
I hope to be close by but not too close &^).
 =20
0000Z-0200Z   30m   10.11x +++/---   HW-9

0200Z-0400Z   40m N/T+ 7.113 +/- T-T Argo 515

Bob - I saw the sked has been updated on your page. Sorry for the=20
inconvenience.

72 de n3qoo - john

John A. Evans   Chief System Administrator
Office: (719) 528-1800 x164   Titan Client/Server Technologies
Fax: (719) 528-1275   1115 Elkton Dr, Suite 200
email: jaevans@cos.cst.titan.com Colorado Springs, CO 80907-3535

Norcal #262 QRP-L #219 QRP-ARCI #8303 NE-QRP #213 CQC #045
CQrp   #15   NJ-QRP #50   AK-QRP   #52   NW-QRP #454
Personal Web Page: http://www.geocities.com/capecanaveral/9773/

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: windish@ix.netcom.com (Walter G. Windish)

Subject: [16184] Fwd: Easter Sunday brings "SPOTS"
Message-ID: <199703312045.OAA26375@dfw-ix12.ix.netcom.com>

I thought some of you might be interested in this posting re:sunspots
from a local astronomy club (ARCI test, here I come!):

- Walt KB2JE

Subject: Easter Sunday brings "SPOTS"

Hello everyone, hope each and every one of you had a very nice Easter.
As for myself, my Easter will not arrive for another month (Russian
Orthadox).

However, I had a pleasant day with the "SPOTS". That is, I set up my
10" Mead, added the solar filter, brought out the laptop, ccd (old one)
and attempted to take photo's of the SUN. TOO BRIGHT! So I went back
to basics. I found three LARGE Sunspots grouped together, along with
one small sunspot. And just southwest of these was a group of three or
four smaller sunspots. Having film in my 35mm, I proceeded to take
some 15 "shots of the spots", while enjoying the lovely weather (the
calm before the storm).

That's it for now, so see you at the meeting (enjoy the snow
tomorrow!!)

VP

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: mike@krypton.nmr.Hawaii.Edu (Mike W. Burger)
Subject: [16201] Gallon and a Half
Message-ID: <9703312318.AA10937@krypton.nmr.Hawaii.Edu>

Since I have never owned a killerwatt, I was tempted to see how
the other half, OK, how the other 99.6% live. I visited a serious
contest station that had six individual operating positions, each

with their own Henry 3 KW PEP amp. The antennas were not too shabby either.

It was interesting. I swear we were creating our own ionosphere. We openned 10 meters to Japan by brute force with a 28 Mhz signal out of 10 element beam that must have been knocking birds out of the sky in a stupor!

Contesting at this level is a special interest. The station certainly was the king of the hill. I am anxious to see how they placed in the contest. The call was KH7R and they certainly were able to load the legal limit on every band from 10 to 80 with 160 being added.

The requirement here was endurance, speed, creating and then working pileups, being able to computer log and operate at the same time as fast as possible.

It was about as far from QRP as you can get. The person who said QRP operating is a sport, is certainly correct. Every line I add to the log is a victory. It was great fun to experience the opposite end of the spectrum with maximum QRO. Still, I was back fighting the lanai antenna on Saturday and managed to net another 20 meter contact with my 5 watts. I am making good progress on the kite antennas and awaiting the SLV's. I even found a 26 foot version of the collapsible fishing pole, very similar to the ones described for the SLV, but a full $54!

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Neil Heckt <neil@aade.com>
Subject: [16191] Homebrew Heaven
Message-ID: <33403138.406E@aade.com>

Homebrew Heaven (Almost All Digital Electronics)

My web site at http://www.aade.com is dedicated to amateurs, professionals and hobbists interested in circuit design and construction

(While shamelessly touting my popular L/C Meter IIB and Digital Frequency Display Kits).

You will find links of genuine interest in My Favorite Links http://www.aade.com/links

Where you can download demo or free printed circuit,

schematic capture and circuit analysis programs (ie:SPICE),
microcontroller assemblers and simulators and
PLD compilers.

Where you can download data sheets for most any IC,

Sources of new and surplus equipment and parts,

Links to other kit manufacturers

and links to many amateur radio sites.

Watch for the May issue of QST for a feature article on the
Digital Frequency Display which can add digital frequency
readout to most any rig from direct conversion to superheterodye
HF, VHF, UHF and SHF.

Watch Nuts and Volts magazine in the next month or two for a
feature article about my L/C Meter IIB which can measure
from 1 nano-henry (.001uHy) to 150 mHy and .01pf to 1.5ufd.
with 1% accuracy and is automatic ranging and self-calibrating.

--
Neil
Almost All Digital Electronics
Homebrew Heaven at http://www.aade.com
Home of L/C Meter IIB and Digital Frequency Display
Links to sites of interest to Engineers, Amateurs and hobbyists
interested in Circuit Design and construction.

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: NilsBull@aol.com
Subject: [16186] It's here! & other mumblings
Message-ID: <970331161737_2080677543@emout05.mail.aol.com>

Well, number 181 of the RBAT (like "arr-bat" maybe?) was waiting for me when
I got home tonight. I looked at the parts and the board +c and thought
"This'd fit in the 40m Howes transceiver box and fill up a hole on the front
panel." Then I thought "Nah, it'd fit in an Altoids tin and then I could hook
it to whatever." Then I thought "Or I could put it in an oak box with inlaid
ivory and ...." At which point I realized that my friend Steve Quackenbush
was right, "It is precisely the failure of the self to coincide with itself
that is at the root of the nature of language."

The Altoids box is looking pretty intense. Maybe it needs deconstructing.

But first.... the Badgers!!!!!!

73
Nils
WB8IJN +c
.... That does it for you, self. I'm callin' the Pope!

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: mdwatt@usit.net (Marty Watt)
Subject: [16118] JIT -- the Consolidated Const Manual for 38 Special is ready!
Message-ID: <334136bf.6018227@smtp.usit.net>

I have completed, and Doug (KI6DS) has given me his permission to
post what I'm calling the "consolidated 38 special construction
manual". This should be considered a beta version -- tips,
troubles, hints are welcome.

Currently, I'm working on converting to ASCII format to post here,
for those without web access. For those with web access, use the
following URL:

http://www.public.usit.net/mdwatt/38special.zip

There is *no* link from my homepage, which is dedicated to other
topics, to this file. The *full* URL must be entered exactly. The
zip file is *NOT* self extracting, and contains two files, one in
Word for Windows 95 and one for WordPerfect 6.1 for Windows. The
file was originally formatted in Word for Windows95. Microsoft has
a free Word document viewer/printer available from their website, if
you don't have a compatible version of word. I haven't tried it,
but the file will be compatible. I can't speak to how to view it in
Word 6.0 or another version for Windows 3.1.

I'm working on an ASCII version which I will share here, in a
different post. The real difference is the formatting, which is
pretty integral -- I'm pretty visual, and the manual reflects that
organizationally.

In any event, have at it.
=20
72 es 73 de=20
Marty, KM7W

Jackson, Tennessee   e-mail: mdwatt@usit.net
                                  http://www.public.usit.net/mdwatt

"The Curmudgeon's Corner"
NorCal #???? - ARCI #7514 - QRP-L #953 - AK/QRP #098 - Grid EM55oq
~~~~~~

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: tayloe_d@juno.com (Daniel R Tayloe)
Subject: [16117] Juno Problems?
Message-ID: <19970330.203721.7703.7.tayloe_d@juno.com>

The last week and a half has been really rough here trying to get through
on Juno.

Anyone else having similar problems or know what is going on?

- Dan Tayloe, N7VE, Phoenix, Az, QRPL # 696, Az ScQRPions

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: ed.welch@cheaha.com (ED WELCH)
Subject: [16108] KENT Touch Twin Paddle Key and Keyer Kit - - INFO
Message-ID: <8D4F43B.0004001C9C.uuout@cheaha.com>

Just wanted to share a bit of info on a toy that I picked up yesterday
at the hamfest in Columbus, GA. This might be old news to some, but to
me this is a *really* neat QRP item!!!! So bear with me if I'm hashing
old news.

I was leaving the hamfest and, of course, looking to be sure I hadn't
missed anything. As I passed by the last table by the door I happened
to look down and see this tiny set of paddles. I stopped and played
with them a minute and *really* liked'em! :)

Interesting note is that there is no paddle movement. The paddles are
foil-covered and through finger contact they send a dit or dah. Really
neat. I guess it's got something to do with body resistance or
something. I'm no whiz at electronics....yet<g>, so probably the
explanation as to how they work is rather simple.

Needless to say one of the kit packages kept calling "eeeddddddd,
eeeeeddddddd, take me with you..." so of course I had to get with the
vendor and become the proud keeper of one of the jewels.

I've always used a straight key...figuring when my speed picks up I'm
move on to paddles, but this set really caught my attention. Anyhow,
here's some of the info from the information/instruction sheet....
~~~~~~

KENT Touch Twin Paddle Key and Keyer Kit

New product of Famous KENT KEY of England.

Touted as having no moving parts.

Kit includes programmed ROM, Volt-reg, 300mw Sidetone Amp, Paddle, and Relay, all onboard parts, pots for volume and speed. (You add ps/battery (8-16v), speaker, case/weight, ect.,.).

The parts list, parts layout, schematic, and building instructions are all qrp in that they are listed on a single side of a sheet of paper. (Not real complicated!)

Small size suitable for portable use. (No kidding! :))

Adjustable speed from 5-40 wpm.

PCB dimensions are 50mm x 66mm (I measured abt 2.5"x1.8").
Stock paddles extend outward about an inch. Lot's of possibilities for mods on the actual paddles being as they're "touch" sensitive...low profile "touch pads", shortened paddles, etc.,.

Quality looks good. Price was $39.00. I'm happy....haven't built them yet, but if they work as well as those on display then...I'm happy! :)

There's an order form on the opposite side of the instructions/parts sheet. Here's the info there...

Parts Kit.....$39.00
KENT Touch Key (90% Assembled)..... 52.00 (hamfest was $49.00)
(you install paddles and pots)
Shipping..... 4.00

Here's the contact info....

Lynics International Corporation
8 Amlajack Blvd.
Suite 362
Newnan, GA 30265 USA

Fax: 770-502-9827
Voice: 770-251-2235
Email: 103222.760@compuserve.com

I defintely have no connection, interest, cousins working there, or whatever with KENT or LYNICS....I just thought some of ya'll might be

interested in these paddles/keyers. Definitely QRP!!!!! :)

Take care,

72/73
Ed Welch KF4KRV
NorCal Member #???
1st Grand Poobah ScQRPion of Alabama
QRP-L #873 - FISTS #2964
Luverne, Alabama
Crenshaw County - Grid EM61
          +---+
----------+ Norcal 40a es Straight Key es Wire-wrapped Trees +----------
          +---+

                >   Isn't "time" a 4-letter word?   <

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: pmk@juno.com
Subject: [16124] LDG QRP es QRO building review.
Message-ID: <19970331.053029.4735.1.PMK@juno.com>

Just got done with the QRO version LDG auto tuner. It went together just
as easy as the QRP version. It took about a hour for the QRP and a hour
and a half for the QRO just on the boards. It took me a evening on the
QRP installation into a double CD case and about the same building the
case for the QRO.
The QRO ended up about 2/3rds the size of the TS-50 and will fit nicely
into the trunk on the motorcycle.

I was very pleased on how easy they went together and worked without a
hitch.

For those who haven't herd of them they are on the NorCal page and Scott
Rosenfeld has a group but going at the moment on the list here.
He can be reached at   ham@w3eax.umd.edu

72/73 de Patrick KD4OBQ

ar

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Joel Malman <malman@BBN.COM>

Subject: [16203] let the games begin
Message-ID: <199703312342.SAA86433@nss2.CC.Lehigh.EDU>

Chuck,

> let the games begin

I can hardly wait.. about 30 minutes till the gong sounds. Got the rig all warmed up. The antenna is a question though. Here in N.E. we are under blizzard conditions .. a "Nor Easter". They say to expect about 2 foot of snow and ~60 MPH winds. The big dipole is under stress! The newsman says to expect power outages tonight, so I have the gell cells all recharged.

Anyone know what snow does to RF?

/joel wa1qvm (malman@bbn.com .. condo-bound in concord, ma.)
WIMPS: Qs=000 30m=0 17m=0 12m=0 States=00/00/00 DX=00/00/00

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Brian K7ON Short <ke7gh@primenet.com>
Subject: [16167] Missing Diode Conspiracy?
Message-ID: <3.0.1.32.19970331181637.0072cbd8@mailhost.primenet.com>

As you know, I'm building my second NorCal kit presently, the "original" Sierra.

Anyway, I never said anything when building the 38 Special, but it came complete except for the 1N914 diodes. Now, the Sierra seems to NOT have these same components? Strange?

Coincidence? No, conspiracy, I say!

Anyway, I was reading NA5N's article about curing "thump" in some NW kits by substituting diodes as some kits were shipped with leaky diodes. Perhaps NorCal is doing me (us) a favor here?

I have lots of these diodes (new) in the junque box, so it is no sweat, but I'd like to get to the bottom of this :)

73, Brian k7on@qsl.net

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: kh6b@juno.com (Dean W Manley)

Subject: [16151] More ten tec colors
Message-ID: <19970331.061834.5391.2.kh6b@juno.com>

Hello Al, my TT515 has black box accessories
210 PSU and 206A crystal calibrator.

73 and Aloha, Dean Manley KH6B
ARRL Life Member, ARCI 6257,
QRP-L 1032, HI-QRP 1, NorCal ??, QCWA
BK29KP Hilo, Hawaii < kh6b@juno.com>

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Jim Wilson-EJW012 <Jim_Wilson-EJW012@email.mot.com>
Subject: [16173] Need HP-350D switch
Message-ID: <"Macintosh */PRMD=MOT/ADMD=MOT/C=US/"@MHS>

From: Wilson-EJW012 Jim on Mon, Mar 31, 1997 12:28 PM
Subject: Need HP-350D switch

I need a replacement 0-10 dB wafer switch for an HP-350D 600 Ohm attenuator.
 Anyone have a junker -350D with a working switch that they would like to
part-out?

Thanks, Jim

- -
Jim Wilson
3815 NW 72 Dr.
Coral Springs, FL 33065-2244
tel: 954-723-4532 (day); 954-341-3306 (eve)
fax: 954-723-5064
email: EJW012@email.mot.com
- -

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Len W. Touth" <len@infinet.com>
Subject: [16153] NEW KIT! Mini Receiver Picture on WWW
Message-ID: <199703311640.LAA03483@mail1.infinet.com>

The CQrp MRX-40 pictures are now available on the www along with
ordering info. and other related information.

direct web address (bypasses CQrp index pages and such) is:

http://www.infinet.com/~len/mrx40.html

Check it out and get your orders in to K8IDN if interested. Shipment is still expected to commence about the first week in May

Best 72/3
Len
KG8SF
len@infinet.com KG8SF@key.com

QRP-L # 841 CQrp # 2 ARCI # 9025 FISTS # 2134

HF Digital Communications - CW/Pactor/G-Tor/RTTY/Amtor
CHARTER MEMBER - THE COLUMBUS QRP CLUB - *CQrp*
Web Page: http://www.infinet.com/~len
QRP Homebrew Rigs = OHR 400, S&S TAC-1, NORCAL 38S, SWL GM-15,
Kanga Any Band Xmitter, Bare Essential 50c5 Xmitter

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: w7rfm@juno.com (John E Hirsch)
Subject: [16112] No osculation
Message-ID: <19970330.171202.2654.0.w7rfm@juno.com>

Help needed with a 38s. A friend of mine who has his 38s is having proplems getting the two crystles to osculate.
Any one have an idea what his problem might be?

I hope he has all the bugs worked out before mine gets here. That way I can get it up and running faster.

TNX ----de W7RFM (John)

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: wa5whn@juno.com (Jay D Miller)
Subject: [16195] NorCal QRP To The Field/April 26th/Questions/Requests
Message-ID: <19970331.153232.4455.0.wa5whn@juno.com>

QRP-Lers,

I had talked to Jerry Parker (jparker@fix.net), same as last year, after the event is completed, cc Jerry on Your' QRPTTF Reports, so that he can post them in the NorCal Web page.

What HF Voice QRP Frequency (Same as Doug Hendrick's question) are we going to monitor, for this event ? I have a WM-20 (Dave Benson's design) that I want to break in. I was thinking about the RTTY side too, but, like last year, most all of the contacts were on CW.

Now if only the wx & solar conditions will cooperate, we may see some 10/15 meter activity, for this event too, without the wind (I hope). :-)

For the Chaps across the Pond (Atlantic), we did copy some of You last year on 20 meters cw. (I was reading the '96 QRPTTF reports on the NorCal web page).

Where is everybody planning on heading out to, for QRPTTF ?

T - 25 days & counting.

"Calling 2X2L, calling 2X2L,..." " (Excerpt from "The War of the Worlds")

Anyone, in NJ, going to operate from Grover's Mill for QRPTTF ?

72...Jay, WA5WHN DM65qd

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Elliott Lawrence <edl@pacbell.net>
Subject: [16169] Norcal Wbstie
Message-ID: <333FFD24.4B31@pacbell.net>

No problem accessing the site at this location. I use Pacific Bell.

Elliott
WA6TLA

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Charles Cashion <ccashion@spdmail.spd.dsccc.com>
Subject: [16138] NORTEX meeting Sat 05 April 1997
Message-ID: <199703311407.IAA05560@vob005.spd.dsccc.com>

You are all (English for you'all) are invited to the next meeting of NORTEX, the North Texas QRP club. This meeting will be informal (all NORTEX meetings are informal). The meeting will convene at 10:AM at Bodacious BBQ in Arlington Texas on Saturday the 5th of April. For those interested, BBQ may be purchased and eaten beginning at 11:AM.

Bodacious BBQ is on Division about 1/4 mile East of Hwy 157. If you take Interstate 30 to get to Arlington, there is an exit at Hwy 157. >From that exit, Division is about 1.9 miles South of 30 and Bodacious BBQ is about 1/4 mile East of 157.

(Interstate 30 was known as the old Dallas-Ft.Worth toll road)

The ribs at Bodacious BBQ have received the Mike Dooley, N5BGZ, seal of approval.

This location has been arranged by Barbara Spencer, KK5QA. She deserves a special thanks for finding this meeting place.

I hope you can make it.
Charles
W5ISZ QRP-L#76

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Mike Robinson <miker@cc.com>
Subject: [16148] PCB folks
Message-ID: <199703311610.JAA16158@gecko.cc.com>

Hey Gang,

I'm looking for someone that works in a PCB shop.

Anybody done work with the PNP Techniks PCB transfer sheets?

NCARC Hamfest May 31, Larimer County Fairgrounds, Loveland, CO
=-=
7.3 de Michael N7MR   miker@cc.com   michael@frii.com
                http://www.frii.com/~michael

QRP-L #126   Norcal #857   CQC #180
=-=

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: ericvia@why.net (Eric Via)
Subject: [16116] Preaching ALL up & down the dial...
Message-ID: <v01520d1771508cdcf554@[207.211.121.23]>

Okay,

I'm going to show my newness to this hobby (or is it a SPORT!?)

I think Ham Radio and QRP in particular are more of a SPORT than
a hobby so that's what I'm gonna call it!

I never realized what you guys meant when you spoke of contending with
International Broadcasting on 40M!!!

WOW! This guy's preaching to me - and he's EVERYWHERE!!

Us QRP'er's don't stand a chance against this! ARRRGHH! :-)

Well I may not get any QSO's tonight...but I'll know the lord....

72 Eric AD4SS
Wylie, TX

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: NilsBull@aol.com
Subject: [16115] QAPing 10.106+/-
Message-ID: <970330223110_-736873107@emout18.mail.aol.com>

I was just listening around (doesn't anyone QSO anymore?) and heard a carrier
with music on 10.106. Mixer product, I says to myself. I walked down the
hall, grabbed the ICF7600G and tuned it to 10.106. Different antenna. There's
the carrier; there's the music. Weaker, yes. There all the same.

So am I nuts? The signal wasn't what I'd call "in there real good," but I
could hear the music pretty plainly. Not that I could figure out what kind of
music it was, being as it sounds like SSB from here.

First the fish phones. Then the numbers stations. Then FM. Then more numbers stations. Then more fish. Then some kind of broadcast. Or jamming? I can't get my numbers to figure out which seat to take the the QRP banquet and my badgers are all two weeks late and my girlfriend just left me for a guy who found a comet behind the ajax next to the brillo pads where all the hippies live waiting for J. R. "Bob" Dobbs to come back and reinitialize the Elvis set in everybody's brother's e-meter that was left over from the last time I got my medication mixed up.

So what else is new? Wanna hear about the varnish remover & the Pearl? Separate email, of course. Oh, new rollers too.

73
Nils
WB8IJN +c
. .. and no, I'm too sleepy to Q . . .

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Brian K7ON Short <ke7gh@primenet.com>
Subject: [16146] QRP Awards?
Message-ID: <3.0.1.32.19970331155737.006984c4@mailhost.primenet.com>

Gotta go solder on the Sierra soon, but been operating the 38s
some and began wondering:

1) Just sent my 40m WAS to ARRL last week, but been thinking of
   starting to keep track on 30m for 30m WAS QRP, but...
   a) Is there such an award?
   b) What needs to happen in terms of QSLs? Special documentation?
   c) What proof is there that the QSO was QRP?

2) Among "Low Power" contesters (<150w) there is much debate about
   the use of "amps" even if power is adjusted (down) to 150w. It
   has been subject of great controversy and many accuse others of
   using more than the 150w... Seems many QRPers have QRO rigs and
   some even use them QRP, so does this analogous question ever
   come up? My plan is to use a "QRP Rig" for any "QRP" operation,
   but again with QRO rigs here someone (with a severe case of sour
   or fermented grapes) *could* complain...
   Seems like honor among thieves or the like? Comments?

3) Is there a reference for (international) QRP operating awards?

Brian Short 1994 E Laguna Dr Tempe, Az 85282 (602)839-3484 k7on@qsl.net

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Peter Barville <peter@barville.demon.co.uk>
Subject: [16133] QRP info (Dx and Contests) Web Page
Message-ID: <$QI3DEA9J7PzEwaN@barville.demon.co.uk>

Hi Folks

I have just started putting together a new Web Page containing
information about QRP DxPeditions and contests. The contests
information is not available yet, but will be there as soon as
I get the time to put it together.

Point your browsers at "http://www.barville.demon.co.uk/qrpinfo.htm",
but please remember to make allowances for this beginner! I hope to
improve it as time goes by.

If you have a QRP related Web Page yourself and would like to include
a link to this page, I shall be delighted. Thank you.

72

--
Peter G3XJS

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Vasili S. Maslyukov" <vasmas@ham.isu.runnet.ru>
Subject: [16202] QRPer can be recoginezed at once.
Message-ID: <AAXL4GpmdA@ham.isu.runnet.ru>

01.04.97 20:30 (IRK local time) Tuesday

Hi Gang,

There is quite interesting news from Russia.

The Russian FCC declared that:

"...to meet EPA requirements and promote QRP activity of amateur stations
 the Section I.apr. should be added with following:
 ...
 ii. Every QRP amateur station has to add in a call-sign's prefix
     of the said station:
     1) if said station emits within 0...499mW   - 70 - (e.g. 70RA3AA)

```
     2) if said station emits within 500mW...999mW - 71 - (e.g. 71RA3AA)
     3) if said station emits within 1W...4999mW   - 72 - (e.g. 72RA3AA)
     4) if said station emits within 5W...10W      - 73 - (e.g. 73RA3AA)
 ...
"

So now and then everybody can tell at once the QRP and QRPp stations on a
band.

72&73! 71UA0SN
Wasya
---
*------------------------------------------------------------------------*
*  UA0SN             Tel +7(3952)31 9181  E-mail:vasmas@HAM.isu.runnet.ru *
*  Vasili MASLYUKOV  Irkutsk, P.O.Box 323, 664050, Russia                 *
*  NorCal #750       QTH Locator: OO22di        IRK time = GMT+8          *



From owner-qrp-l@Lehigh.EDU  Mon Mar 31 18:04:12 1997
From: "Howard Z Weinstein" <Howard.Z.Weinstein@lmco.com>
Subject: [16178] Re[2]: Got the new kit bug.
Message-ID: <003DC3340132E16E*/c=us/admd=telemail/prmd=mmc/o=den/ou=ccmail/
s=Weinstein/g=Howard/i=Z/@MHS>



     Well put Bill!
     Forget circuit boards! Do it with tubes and point to point wiring. Now
     that's HOMEBREW!
     Tnx es 72,
     Howard K3HW


_______________________________ Reply Separator _________________________________
Subject: Re: Got the new kit bug.
Author:  k5zty@juno.com at MAILHUB-SMTP
From owner-qrp-l@Lehigh.EDU  Mon Mar 31 18:04:12 1997
From: N0TU/Steve <N0TU@webaccess.net>
Subject: [16193] RS modem case for 38s?
Message-ID: <33403536.D43@webaccess.net>

Hey 38sers....Anyone using the RS modem project box to package their
38s...I just repackaged a SW40 into one and sure do like it's size,
shape, look and feel factor. I don't see any reason for not using the
same for the 38s...maybe the heat sink issue might be a problem...anyone
tired this case yet?  I've put a pic up on my 38s webpage....Cheers
Steve
```

pics on bottom left - http://www.webaccess.net/~S&P/my38s.htm

---
"Just doing it" - Havin'a blast buildin'& usin'QRP gear that is...
n0tu/hw8/49er/SW40/38s/solar/backpack-mobile... QRP-L # 911
My homepage - http://www.webaccess.net/~S&P ARS# 206 CQC# 394

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Bill Jones <kd7s@psnw.com>
Subject: [16198] Sloping Dipole Questions
Message-ID: <33403ABA.35A2@psnw.com>

Friends

I am considering using a full-size 40 meter dipole for backpacking use. It seems like a good idea to erect it at a 45 degree angle to the ground using a single support (tree) and anchoring the opposite leg close to the ground. I would bring the feedline back to the base of the tree (at right angles to the antenna.) Because I've never done this before I'm curious to know how the antenna can be expected to perform compared to a horizontal or inverted "V" configuration. Also, would the impedance at the feedline change significantly? Anybody been there - done that?
--

==========
Bill Jones - KD7S
Sanger, California
Reply to kd7s@psnw.com
==========

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Tero Ranta" <dixie@icenet.fi>
Subject: [16128] T2FD
Message-ID: <199703310806.LAA22478@icebox.icenet.fi>

Hi,

I'm planning to build T2FD antenna for 160m-10m. But how to calculate the dimemensions and the value of terminating resistor?

Regards,

Tero Ranta

Vacuum Tube Tesla Coil Page:
http://www.icenet.fi/~dixie/

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: kh6b@juno.com (Dean W Manley)
Subject: [16150] Ten Tec colors
Message-ID: <19970331.061834.5391.1.kh6b@juno.com>

You wrote:

>Did Ten Tec make a matching Power supply
>and Calibrator fot the Argonaut 515 ? I have
>a 515 with matching Filter but there was no
>Ten Tec power supply and the calibrator was
>the tan or biege color like the 509 and PM-3.
>
>Thanks
>
>   ......de....W8LRM.....Al
>
>MI-QRP #41   QRP-L #532   QRP-ARCI #6524
>G-QRP #4152 NOR-CAL #246 CQC #289 (EN62RE)
>>From Southwest Michigans Sunset Coast:
>Saint Joseph, Berrien County, Michigan !
>

Al, I have the TT515 and its matching PSU 210
is black. Not sure about calibrator. My calibrator
matches my TT509. Hope this info helps. Maybe
someday, somebody will write the Ten Tec story
and tell everything! CUL and Aloha.

Dean KH6B
HI-QRP 1, QRP-L 1032
kh6b@juno.com

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: David Adams <adamsclan@netgate.net>
Subject: [16181] Thanks for the ersin info

Message-ID: <33401491.5CA2@netgate.net>

Okay!!! Thanks for all the info! The stuff seems to be well loved for electronics work (and it does melt mighty nice).

73 de dave, n9uxu

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Ron Giuntini <rong@slip.net>
Subject: [16141] Thanks Marty!
Message-ID: <E0wBiO0-0004t2-00@ferret>

The 38S Beta Manual is very much appreciated. It is going to clear up alot of confusion and allow me to delete a huge number of postings I have been trying to sort out and boil down to exactly what you have provided in an excellent format. Thank you very much Marty.
Ron, KB6GK

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Steve Bornstein <saborns@freenet.columbus.oh.us>
Subject: [16176] UPDATE: MRX-40 Mini Rcvr
Message-ID: <Pine.3.07.9703311413.A14158-9100000@login>

G'day All,

Just to update everyone on the CQrp (Columbus QRP Club) MRX-40 Mini Receiver Kit. I just checked with the PCB shop and we should be shipping the kits no later than April 21st.

The price is $18.00 including shipping (USA). There is now a photo of the prototype on the CQrp Web site.

73, Steve K8IDN

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Jeremy Cowgar" <jcowgar@villers.com>
Subject: [16142] Upgraded. Now General.
Message-ID: <B0000009074@mail.villers.com>

Just to let everyone know, I am now a general! I went to the test knowing that I was not going to pass the morse code, but figured I'd give it a try since I was their taking the written anyways. What do you know, I passed the written!

This weekend I was down on 30m playing around having fun. Then I got to work today and on my desk was my 38 Special kit that had arrive in the mail this weekend... Can't wait to start playing with it.

Jeremy Cowgar - KB8LFA
KB8LFA@qsl.net

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
Subject: [16110] Value?:Dentron SuperTuner
Message-ID: <970331010655_70511.3041_IHD82-1@CompuServe.COM>

Gang:

Tons of replies have flooded in...so many that I abandoned my usual practice of responding to each one individually. Thanks for all the help.

Essentially, most guys said the tuner (if in good condx) can be outstanding. They said it will tune just about anything. BTW, it does not include a built-in SWR meter. The unit I have in view is the 1KW unit. It appears excellent electrically, with only a few housepaint splatters outside the case.

Someone is sending a copy of the 4-page manual. So I will be all set.

Anyway, thanks everyone for the help. What a great bunch of guys all of you are. I was away from ham radio 33 years, and really playing catchup (and a genuine paradigm shift, I can tell you!).

72/73,
--Doc/K0EVZ qrp-l 861 mn-qrp 19 nj-qrp 69 ak/qrp 139 norcql cqc arrl

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: k5zty@juno.com (WILLIAM A STIETENROTH)
Subject: [16111] WA3NNA/B copied here

Message-ID: <19970331.000605.7535.2.k5zty@juno.com>

I wasn't even looking for a beacon when I heard this loud WA3NNA/B QRP
comming over my reciever on 20mtrs. RST 599 here in Houston at 23:37z at
"2w EGGS". Then at 23:39 it said "200mw HUNT" and the signal was still
599. Must have a great antenna.
(I love that call"WANNAB" Wanna be a KW when I grow up).
72,
Bill
Houston,TX
k5zty@juno.com
WITHOUT CW, IT'S JUST CB
ARCI 8817, CQC 178, NOR-CAL 1321, MI 1472, NE 440
QRP-L 473

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [16197] WIMPS
Message-ID: <199703312245.WAA22729@chuck.dallas.sgi.com>

OK group, let the games begin.

I have been in the classroom all day, so web stuff delayed til late
tonight. Will push the updated pages in the blind, so cross your
fingers.

So in about an hour after this post at 0000Z all contacts on
30, 17, and 12 meters count.

I went over to the web sight and looked at the latest H-alpha
photo of the sun and gang, there is a lot of activity. The
higher bands should be hopping with activity. Start at 10M
and work your way down looking for activity.

If you hear a lot of QRN too, it's because of weather conditions
near here and probably in Dayton OH too. It's that time of year.

gl to all
Chuck Adams K5FO CP-60 adams@sgi.com
http://reality.sgi.com/employees/adams_dallas/
WIMPS: Qs=000 30m=0 17m=0 12m=0 States=00/00/00

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Vic Blackwell" <blackwel@tlcnet.muohio.edu>
Subject: [16166] wipeout
Message-ID: <9703311804.AA27543@tlcnet.muohio.edu>

Any send anything to me at or near the noon hour today? EST

I did a wipeout off all incoming msg. Some of the stuff looked interesting.
But all gone now.

de vic ad8k . .

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: John Dorson <jdorson@bbs.mpcs.com>
Subject: [16109] wound balun for mini tuner
Message-ID: <199703310031.TAA04101@bbs.mpcs.com>

well based on all of the replies i recv'd regarding wire size and the slt tuner
i took today off from work and wound the balun. never wanting to do an
incomplete
job i then added jacks to the back of my mini tuner and wired in the balun.
everything just fit. now for the real test, attaching to the slv using balanced
line to see if it works. i'll fill you all in after trying it out. hopefully
tomorrow morning...

Thank You

John Dorson Real Estate Consultant in Melbourne Beach, Brevard County Florida
E-Mail To: jdorson@bbs.mpcs.com

```
 _____________________________________________________________________
| Trying for WAS -      AL,AK,AZ,AR,CA,CO,CT,FL,GA,IL,IA,KS,KY,LA,ME,MD,MA|
| and worked these:      MI,MN,MT,NH,NJ,NY,NC,ND,OH,OK,OR,PA,RI,TX,VT,VA,WA|
|             WI                                                |
|_____________________________________________________________________|
```

K2JHU only QRP... CQC #351, GQRP # 9092, QRP-L #672

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Rogerio Gonzaga <gonzaga@med.up.pt>
Subject: [16130] WPX SSB Contest
Message-ID: <199703311709.TAA15632@mail.med.up.pt>

Hi, Folks,

I only could be about 14 hours on the air during the WPX SSB Contest. It has been my first SSB QRP contest. I found it is much more difficult than CW QRP contesting, at least during the present propagation condx. During previous CW contests, I could hardly remember that I was in QRP, but in SSB it could be very difficult to be eard, chiefly in the lower bands. My position in the western edge of Europe was not very good for low band contesting as well, I had only nearby countries at East. Anyway, I could be make 151 presumed valid Qs, with 131 prefixes and 48 DXCC countries. All bands worked (yes, 1 Eu Q on the top band and 2 Qs on the 10 meters, but one of those was with a CT1 station, the other being a PY). Twenties were the backbone of the contest, I could get trough the westside with my beam. I could get more American than Eu stations, and the result has been a presumed claimed score of more than 40000. Highlights: FM, FG, S0, LX, PY0, 6W, 4V, TI, P4, KP2 and VP5. Working condx: QRP Plus MkII, TH6 19 meters AGL, Windom 18 meters AGL and 160m Marconi 18 meters AGL.

I hope everyone has enjoyed the contest as much as I did. 72/73 de Roger, CT1ETT

Rogerio A. F. Gonzaga, MD, PhD
Surgical Professor at the Faculdade de Medicina do Porto - Portugal
Ex-Honorary Surgical Registrar at the Hammersmith Hospital - London, UK

Radio Amateur CT1ETT QTH Loc IN51re
G-QRP Club # 8673 ISWL # CT-20574 QRP-L #516

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Ralph L. Irons" <rli8m@weyl.math.virginia.edu>
Subject: [16135] WPX SSB Contest/ WM-20
Message-ID: <Pine.A32.3.93.970331081623.58714A-100000@weyl.math.Virginia.EDU>

I love these contests! During the short time I have to operate on weekends, I usually make four or five contacts. But with one of these contests going on, provided I can figure out the exchange (in this case, just 59 followed by a serial number -- some guys even omit the 59 :-) I can have alot of short QSO's -- pick up new states and countries -- in the same amount of time. This weekend, I made 30 contacts with 15 countries (8 of them new DXCC countries for me), and I haven't checked for states yet! What fun!

Rig here is the NN1G WM-20 (feaured in the April QST), a 10W
amp, and a dipole.

Am I imagining it, or does the new "N7" call have a few DB over the old
"AA6" call? :-) (My apologies to 6-land!)

72, Ralph N7RI
Charlottesville, VA

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: n4so@juno.com (CHARLES K BROWN)
Subject: [16140] X Y Z's of Oscilloscopes
Message-ID: <19970331.082540.4431.3.n4so@juno.com>

This format is on diskette. The booklet in the softbound format is out
of print according to other sources.
Each file is roughly 8000 to 10,000 bytes long and you can
make your own booklet or leave it in the computer as 9 text files.
The files are a good "starting point" or introduction to oscilloscopes
and their use in electronic repairs.

Ken Brown, N4SO
QTH near Mobile, AL
QRP-L #622
n4so@juno.com

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: n4so@juno.com (CHARLES K BROWN)
Subject: [16134] X Y Z's of Oscilloscopes
Message-ID: <19970331.071554.4431.1.n4so@juno.com>

The booklet called X Y Z's of Oscilloscopes are in 9 text files and make
an introductory book on using the oscilloscope. This version was a zipped
file.
Individual copies are avail. by part number 070-8690-01
Tektronix, Inc.
P. O. Box 1520
Pittsfield, MA 01201

Ken Brown, N4SO
QTH near Mobile, AL
QRP-L #622
n4so@juno.com

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [16120] Re: 50/40/30 Schedule
Message-ID: <199703310405.EAA20847@chuck.dallas.sgi.com>

Dave,

42.835N 77.879W Retsof, NY

We know where you are. ;-)

Chuck Adams K5FO CP-60 adams@sgi.com
http://reality.sgi.com/employees/adams_dallas/
WIMPS: Qs=000 30m=0 17m=0 12m=0 States=00/00/00

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Mark VandeWettering" <markv@tick>
Subject: [16177] Re: BPSK generator Re: QRP Inflection Point
Message-ID: <9703311115.ZM10633@tick>

I have read a bit about the BPSK and CCW modes that ve2iq has worked on.
It is very cool, but I have a somewhat simple question: why are people
working on building audio A/D boards when almost any modern sound card
(approximate cost $30-$50) can do the same job?

I have been experimenting with doing "cheap dsp". On my Pentium-133mghz
computer, I can easily grab 16 bit sound samples at 9600hz and perform
overlapping all-floating point ffts 1024 long and still use < 10% of the
total available CPU time. Admittedly, not everyone has a Pentium, but
many of us certainly do.

I have been experimenting with making a Unix program (I run FreeBSD
at home, but the results should be portable to linux as well) that
duplicates the functionality of HamComm, which appears to be a fairly
neat program. I'd also like to work on BPSK too. Is anyone else here
interested in low power digital experimentation?

Mark

--
Mark T. VandeWettering   Telescope Information (and more)
Email: <markv@pixar.com>   http://webspace.com/markv/
       <markv@webspace.com>   Clear Skies!

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Stanley Wilson <microres@crl.com>
Subject: [16182] Re: BPSK generator Re: QRP Inflection Point
Message-ID: <Pine.SUN.3.91.970331120403.28297A-100000@crl2.crl.com>

Mark I think everyone on the list would be happy to use your software if
provide free of charge. Please post when when available.

I think using the soundborad is an excellent idea and would be the first
to be in line for it's use.

Many have suggested doing this over the past several years, however, no
one has yet to provide the software for amateur use.

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Vic Rosenthal <rakefet@rakefet.com>
Subject: [16171] Re: Ersin Multicore Solder
Message-ID: <3340007D.5ABD@rakefet.com>

David Adams wrote:
>
> Does anyone know anything about this stuff? It is 63/37 and made by
> Multicore Solders of NY, NY. No other indications of what the flux core
> is made up of other than the term ersin (no recommendations not to use
> it on electronics though...)...anyone heard of it?

This is excellent rosin core solder. It's been around for a long time,
and is designed for electronics. I personally like the smell of it.

Vic

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: [16172] Re: Ersin Multicore Solder

Message-ID: <zqWI8EAih$PzEwYP@lfheller.demon.co.uk>

In message <333FECE0.761F@netgate.net>, David Adams
<adamsclan@netgate.net> writes
>Does anyone know anything about this stuff? It is 63/37 and made by
>Multicore Solders of NY, NY. No other indications of what the flux core
>is made up of other than the term ersin (no recommendations not to use
>it on electronics though...)...anyone heard of it?

Ersin Multicore solder is probably the most widely used brand in the UK.
I've used it for years. It has halide activated rosin cores, and is
recommended for electronic use.

73, Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: [16190] Re: Ersin Multicore Solder
Message-ID: <19970331214526.AAA19757@LOCALNAME>

At 04:57 PM 3/31/97 +0000, you wrote:
>Does anyone know anything about this stuff? It is 63/37 and made by
>Multicore Solders of NY, NY. No other indications of what the flux core
>is made up of other than the term ersin (no recommendations not to use
>it on electronics though...)...anyone heard of it?
>
>73 de dave, n9uxu
>
>Ersin has been a specialty product for electronic use for years! In my
opinion, afetr years in the business, their solder is some of the finest
available in the world!
        It was originally a British product. 63/37 is called "eutectic"
grade. This alloy is perhaps the best for overall electronic work. There
is three states of solder during
use: liquid, solid and the "mushy" state. "Eutectic" is the alloy of lead
and tin where
the "mushy" state is at a minimum. Eutectic solder alloy goes very quickly
from a liquidous to a solidus state.
        I haven't bought anything in years and years that was as good as the
Ersin solder.
Early versions had a triple cored flux channel. Today's version has five

flux cores.

73,
E. V. Sandy Blaize, W5TVW
"Boat Anchors collected, restored, repaired, traded and used!"
417 Ridgewood Drive,
Metairie, LA., 70001
ebjr@worldnet.att.net
Looking for: 860 tubes, WL-460 tubes, RK-18,20,28 tubes
Butternut HF2V antenna, G-R test gear.....*

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Bob Follett" <bfollett@ditell.com>
Subject: [16161] RE: FDIM Registration Update
Message-ID: <199703311751.KAA25313@mars.ditell.com>

Gang:

Time for another FDIM Registration report. Things are shaping up nicely! Keep those checks flowing, as we are less than two months away! Currently 86 of us on the list!

LAST	FIRST	CALL	
Adams	Chuck	K5FO	(How does he get number 1 position again? :-))
Albert	Ted	KF8EE	
Bachmann	Richard	N3SLR	
Beedlow	Peter	NN9K	
Benson	Dave	NN1G	
Bertuzzo	Serge	VA3SB	
Bornstein	Steve	K8IDN	
Bowman	Bob	AA5VS	
Butler	Ralph	K6ZAN	
Butler	Ray	WA4KEJ	
Carr	Mike	WA1QAA	
Cavcey	Ken	W0YOR	
Corbin	Robin	NI9R	
Corbin	Lowell	W8IQB	
Cumming	John	VE3JC	
Diana	Gary	N2JGU	
Dobbs	George	G3RJV	
Douglas	Preston	WJ2V	
Doyle	Ron	N8VAR	
Doyle	Don	AC5II	

Durbin	Ken	K8CQO
Eilers	Michael	AC4XS
Evans	Ken	W4DU
Evans	John	N3QOO
Everhart	Joe	N2CX
Fields	Tom	WB9VTY
Firlik	Don	K8AQZ
Firth	Graham	G3MFJ
Fishpool	Tony	G4WIF
Fitton	Jim	W1FMR
Follett	Bob	AB7ST
Foote	John	KR4GL
Frisz	Tom	N9DD
Gaffney	Bernard	N8PVZ
Gobrick	Bob	N0EB
Goemans	Paul	WA9PWP
Greer	Jeffrey	WD4ETO
Hartley	Charles	KM3V
Henshaw	Jerry	KR5L
Heron	George	N2APB
Hintz	Gus	W2ZHA
Jivoin	Gregory	WD8JTN
Johney	Gary	N3BYN
Johnson	Harold	W4ZCB
Karty	Steven	N5SK
Kellogg	Bob	AE4IC
Kellogg	Ellen	A1XYL
Kelsey	Bill	N8ET
Ludinsky	Chuck	K1CL
Lynch	Martin	KA1LXG
Manuel	Ed	N5EM
Massena	Fred	KG8OK
Matheson	Hugh	K0QD
Meier	Pete	WK8S
Midkiff	Monte	N7TAU
Mitchell	Brad	WB8YGG
Moizeau	Charles	W2SH
Moyle	Al	N3KFL
Muscolino	Bruce	W6TOY/3
Owen	James	K4CGY
Passione	Vince	WA2ECP
Powers	David	KB8RVS
Puckett	Dan	WD8AAU
Rea	Al	W8LRM
Reed	Wayne	K9NE
Rees	Chris	G3TUX
Reid	Glen	K5HGB
Roberts	Ken	VE3BGW

Rosenfeld	Scott	NF3I
Schill	Bob	N9ZZ
Scott	James	W9KV
Shearer	Sam	WB5ZJN
Shilhanek	Terence	W0PFR
Simon	Ed	KO4CO
Specht	Philip	K4PQC
Stafford	Jim	W4QO
Tanton	Ed	N4XY
Todd	Ron	K4WZ
Touth	Len	KG8SF
Tracy	Dan	KC9RH
Windish	Walt	KB2JE
Winkler	Dan	N7IVR
Wohlschlag	Dick	WA9FLX
Younce	Jim	K4ZM
Young	Terry	K4KJP
Young	Paul	KC2AHB

FDIM 97 is May 15th, the day before Hamvention at Dayton. The conference runs all day at the Days Inn South, Miamisburg, OH

If you have not registered yet, send $30 in US funds, check or MO, made out to Bob Follett, using the address below. A reminder, Pete Meier, WK8S, will handle the Banquet ticket reservations, and has posted his own instructions to the List.

HOTEL ROOMS:

The 75 Rooms Myron has reserved are filled, and Myron is still seriously ill. So if you have a question about your reservation, contact Buck, ARCI President, at n8cqa@aol.com -- he is hoping to get the list of reserved names from Myron. While there may be last minute cancellations available through Myron/Buck, or direct with the hotel, I suggest making reservations at one of the nearby hotels. I am providing a list, with phone numbers, taken from the Hamvention 97 brouchure. They refer
to this area as Section IV, for reference.

Best Western Continental Inn, Miamisburg,	(937) 866-5500
Days Inn South, Miamisburg,	(937) 847-8422
Econo Lodge South, Dayton,	(937) 223-0166
Holiday Inn Dayton South, Moraine,	(937) 294-1471
Knights Inn Dayton South, Miamisburg,	(937) 859-8797
Red Roof Inn Miamisburg, Miamisburg,	(937) 866-0705
Signature Inn, Miamisburg,	(937) 865-0077
Super 8 Motel, Moraine,	(937) 298-0380

There is also the Hampton South, about 3-4 miles away. Phone # unknown

The Days Inn South address and local phone number are:

3555 Maimisburg Centerville
Dayton, OH 45449
513-847-8422

73, Bob
FDIM Registration Chair

Bob Follett AB7ST, QRP-L # 129, NorCal, ARCI, 10-10, ARS
2861 Estates Dr. VOICE: 801.649.6457
Park City, UT 84060 E-mail: bfollett@ditell.com

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Daniel Puckett <dpuckett@erinet.com>
Subject: [16192] Re: FDIM Registration Update
Message-ID: <3340325B.19B5@erinet.com>

Bob Follett wrote:
>
> HOTEL ROOMS:
>
> The 75 Rooms Myron has reserved are filled, and Myron is still seriously ill.
> So if you have a question about your reservation, contact Buck, ARCI
> President, at n8cqa@aol.com -- he is hoping to get the list of reserved names
> from Myron. While there may be last minute cancellations available through
> Myron/Buck, or direct with the hotel, I suggest making reservations at one of
> the nearby hotels. I am providing a list, with phone numbers, taken from the
> Hamvention 97 brouchure. They refer to this area as Section IV, for reference.
>
><><< SNIP ><><<
>
> There is also the Hampton South, about 3-4 miles away. Phone # unknown

The address and number for the Hampton South is:

8099 Old Yankee Street
Dayton, OH 45458

(937) 436-3700

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Don Faith <Faithd@worldnet.att.net>
Subject: [16114] Re: First QRP rig for Novice/Tech
Message-ID: <333F22B3.6E1B@worldnet.att.net>

Tj Johnston, N4UYQ wrote:
>
> That 38 Special sure sounds good..... now what do you have for us
> Novice/Techs???
> The 40-9er is not available anymore.... any 80m,15m, or 10m QRP monobanders
> like the 38 Special available??? Mods for the 38 Special to Novice/Tech
> bands???
>
> 72/73,
>   Tj Johnston, N4UYQ (Tech+) QRP-L member #1057
>   formerly KA4GVW (Novice)
>   Ashland, Virginia (Hanover County) FM17
>   Richmond Amateur Telecommunications Society
>   http://www.rats.net

The Norcal web page (based on a QRP-L posting by Marty, WB8FNH) has an
entry that discusses the fairly minor changes (a few different
capacitors and a few more windings on the same torroids) necessary
to change the 38S to a 48S with a base frequency of about 7.04
(the difference between 16.257 Mhz and 9.216 xtals). I
have been looking at other possibilities and have come
up with the following: Using two 15 Mhz xtals in place of the 12 Mhz
from the kit (w/ the original 22.1184 Mhz xtal) would yield the bottom
end of the novice 40m band (diff. of 7.1184 Mhz). Using a 21.47727
and two 14.31818 xtals would yield 7.159 Mhz. Refer to page 39
of current Mouser catalogue (in some cases will need to use the
smaller (diff. res.) HC-49/US xtals for the local osc. but I
don't know if this is a problem. The crystals should be of the
"series" variety. I plan to give it a try but it may be
a while (bought an extra kit for experimenting but have a rainbow
tuner, LGD tuner and Dan's 80m ssb kit on order). I myself am a
beginner at this stuff (I'm a ChE, not an EE or particularly
knowledgable in electronics - I just like to build stuff) so perhaps
some of the wizards on this list may be able comment if I have made any
major blunders regarding the above.

Let us know how it works out: Be the first on the QRP-L block to
have a novice band 48S.

73 (es 72) de N9WR, Don C. Faith

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Bob Hightower <ki7mn@dancris.com>
Subject: [16121] Re: JIT -- the Consolidated Const Manual for 38 Special is
Message-ID: <199703310431.VAA27310@dancris.com>

At 04:02 AM 3/31/97 GMT, you wrote:
>I have completed, and Doug (KI6DS) has given me his permission to
>post what I'm calling the "consolidated 38 special construction
>manual". This should be considered a beta version -- tips,
>troubles, hints are welcome.
>
 I haven't tried it,
>but the file will be compatible. I can't speak to how to view it in
>Word 6.0 or another version for Windows 3.1.

Thanks for posting the file, Marty. I just downloaded it and opened the .wpd
version in WP6.0, so it works fine there (With Win95).
73,
Bob, KI7MN Chandler, AZ ScQRPion QRP-L #271, NorCal #1228, CQC #274, QRP
ARCI #8918, AK QRP #30, not in any order of importance.

http://www.dancris.com/~ki7mn

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Gordon Goodwater <gordong@minimall.imm.com>
Subject: [16127] Re: No osculation
Message-ID: <Pine.BSF.3.91.970330233326.1935B-100000@minimall.imm.com>

On Sun, 30 Mar 1997, John E Hirsch wrote:

> Help needed with a 38s. A friend of mine who has his 38s is having
> proplems getting the two crystles to osculate.

Try soft music and candlelight. (Sorry, somebody had to say it!)

73 Gordon KC7TTV

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: [16129] Re: No osculation
Message-ID: <YyiC6FAzK3PzEw9d@lfheller.demon.co.uk>

In message <19970330.171202.2654.0.w7rfm@juno.com>, John E Hirsch
<w7rfm@juno.com> writes
>Help needed with a 38s. A friend of mine who has his 38s is having
>proplems getting the two crystles to osculate.
>Any one have an idea what his problem might be?
>
>I hope he has all the bugs worked out before mine gets here. That way I
>can get it up and running faster.

Perhaps the crystals aren't close close enough to each other. <g>

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "John A. Evans - N3QOO" <jaevans@cos.cst.titan.com>
Subject: [16139] Re: No osculation
Message-ID: <199703311427.JAA137351@nss2.CC.Lehigh.EDU>

Reminds me of a an old time joke question to ask someone. Do you believe
in premarital interdigitation before osculation ?? Of course, the person
you ask is usually stumped - translated, the question is - Do you believe
in holding hands before kissing ??

john

John A. Evans   Chief System Administrator
Office: (719) 528-1800 x164   Titan Client/Server Technologies
Fax: (719) 528-1275   1115 Elkton Dr, Suite 200
email: jaevans@cos.cst.titan.com Colorado Springs, CO 80907-3535

Norcal #262 QRP-L #219 QRP-ARCI #8303 NE-QRP #213 CQC #045
CQrp   #15   NJ-QRP #50   AK-QRP   #52   NW-QRP #454
Personal Web Page: http://www.geocities.com/capecanaveral/9773/

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: wd4et@juno.com
Subject: [16196] Re: Norcal & ARCI websites
Message-ID: <19970331.172645.13174.0.wd4et@juno.com>

The web page addresses have been changed. The following work for me.

Norcal   http://www.fix.net/~jparker/norcal.html

QRP ARCI http://RTPnet.org:80/~qrp/

Thanks for all of the responses.

Jeff, WD4ET

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: wd4et@juno.com
Subject: [16158] Re: Norcal and QRP- ARCI web pages?
Message-ID: <19970331.123041.4294.1.wd4et@juno.com>

Both the Norcal and QRP ARCI web pages are bouncing. Did I miss an
announcement or do I need to check with my internet provider?

Thanks, Jeff WD4ET

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Norm Melick <henmel@worldnet.att.net>
Subject: [16160] Re: Norcal and QRP- ARCI web pages?
Message-ID: <333FF854.481A@worldnet.att.net>

I just tried NorCAl, and it bounced too. I use AT&T.

Norm

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Richard Wilkerson <richqrp@cts.com>
Subject: [16162] Re: Norcal and QRP- ARCI web pages?
Message-ID: <333FFA4E.3F46@cts.com>

Norm Melick wrote:

>
> I just tried NorCAl, and it bounced too. I use AT&T.
>
> Norm
                  ****
No problem here.....Iam on it right now??????
--
Rich Wilkerson, WD6FDD, Santee, Ca.
             ScQRPions

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Richard Wilkerson <richqrp@cts.com>
Subject: [16163] Re: Norcal and QRP- ARCI web pages?
Message-ID: <333FFAB8.6029@cts.com>

Norm Melick wrote:
>
> I just tried NorCAl, and it bounced too. I use AT&T.
>
> Norm
                  ****
You are going to.....www.fix.net/~jparker/norcal.html   ????????
--
Rich Wilkerson, WD6FDD, Santee, Ca.
             ScQRPions

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: James Parsons <k5rov1@worldnet.att.net>
Subject: [16164] Re: Norcal and QRP- ARCI web pages?
Message-ID: <1.5.4.32.19970331175657.0066a374@204.127.3.1>

At 05:45 PM 3/31/97 +0000, you wrote:
>I just tried NorCAl, and it bounced too. I use AT&T.
>
>Norm
>

I just tried NorCal and got it with no trouble. I am also using AT&T>

73...

Jim, K5ROV
k5rov1@worldnet.att.net
EX: KA2FC (JAPAN), KA2JP (JAPAN),

SV0WN (CRETE), SV0WN (RHODES),
DL4NC, W1RLA, K4FEO, K5FBB
John 3:16

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Tj Johnston, N4UYQ" <tjohnsto@erols.com>
Subject: [16165] Re: Norcal and QRP- ARCI web pages?
Message-ID: <3.0.1.32.19970331125351.007df620@pop.erols.com>

At 09:45 AM 3/31/97 -0800, Norm Melick wrote:
>I just tried NorCAl, and it bounced too. I use AT&T.
>
>Norm
>
Been bouncing for 2 days as best as I can tell... been trying that long..
with no effect.... "Requested URL is not on this server..."

72/73,
         Tj Johnston, N4UYQ (Tech+) QRP-L member #1057
            formerly KA4GVW (Novice)
         Ashland, Virginia (Hanover County) FM17gs
         Richmond Amateur Telecommunications Society
         http://www.rats.net

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "John A. Evans - N3QOO" <jaevans@cos.cst.titan.com>
Subject: [16168] Re: Norcal pages !!
Message-ID: <199703311815.NAA164796@nss2.CC.Lehigh.EDU>

With respect to the Norcal page, my old used-to-work link was to=20
http://www.fix.net/norcal.html. Now it requires=20
http://www.fix.net/~jparker/norcal.html. Perhaps a URL link got =
deleted??
Did the webmaster at the fix.net site make big top level changes to =
their
pages ??

john

John A. Evans   Chief System Administrator
Office: (719) 528-1800 x164   Titan Client/Server Technologies
Fax: (719) 528-1275   1115 Elkton Dr, Suite 200

email: jaevans@cos.cst.titan.com Colorado Springs, CO 80907-3535

Norcal #262 QRP-L #219 QRP-ARCI #8303 NE-QRP #213 CQC #045
CQrp #15 NJ-QRP #50 AK-QRP #52 NW-QRP #454
Personal Web Page: http://www.geocities.com/capecanaveral/9773/

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Dale Scott <dcscott@us.ibm.com>
Subject: [16180] re: Norcal Website
Message-ID: <503010000106851000000 2L002*@MHS>

Classification:
Prologue: Dale C. Scott
IBM -- Engineering Technology Solutions
(206) 587-2784 8/277-2784
Epilogue: Internet: (work) dcscott@us.ibm.com
(home) dcscott@ibm.net
OV/VM: dcscott@ibmusm52

I just tried the Norcal website from IBM.NET and got bounced as well. Adding /~jparker/ into the URL then got me into the site.

72/73 -- Dale/kc7khd

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
Subject: [16154] Re: Organic core solder
Message-ID: <199703311643.KAA10570@multi13.netcomi.com>

These water-soluble fluxes MUST be completely removed. The residue itself is slightly conductive, enough to make analog circuits very unreliable. In addition, the continued etching action eventually will dissolve any metal on the board. I have seen boards that looked like Jack Frost made a visit, covered with metallic oxides where there used to be IC pins and board traces. The usual way to clean small quantities of these boards is to run them through several full cycles in a dishwasher (no detergent). Even then, sensitive analog boards may not be clean enough.

BTW, denatured alcohol is mostly water.

Mike K1MG

> For the past year or so I've been using Kester 63/37 organic core solder
which
> defluxes with water. The flux is more aggressive that the stuff I used
to use
> and it always wets out. On the NC38S, I had to deflux the component side
of
> the board as well as the solder side, especially around the 74HC240. It
cured
> most of the transmit instability that required frequent readjustment of
the
> trimmer cap in the transmit section. Denatured alchohol was used instead
of
> water because I didn't want to put water near the trimmer caps.
Compressed air
> and a hair dryer were used to eliminate the denatured alchohol. Since the

> instability got worse with time, I wonder if the minute amount of water
soluble
> flux on the component side was absorbing moisture from the air. Has
anyone
> else had any experience with this?
>
> 73, Rich, N3SLR, Baltimore, MD

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Monte Stark <ku7y@sage.dri.edu>
Subject: [16152] Re: QRP Awards?
Message-ID: <Pine.SUN.3.90.970331081844.25405B-100000@vortex>

On Mon, 31 Mar 1997, Brian K7ON Short wrote:

> 2) Among "Low Power" contesters (<150w) there is much debate about
>   the use of "amps" even if power is adjusted (down) to 150w. It
>   has been subject of great controversy and many accuse others of
>   using more than the 150w... Seems many QRPers have QRO rigs and
>   *some* even use them QRP, so does this analogous question ever
>   come up? My plan is to use a "QRP Rig" for any "QRP" operation,
>   but again with QRO rigs here someone (with a severe case of sour
>   or fermented grapes) *could* complain...
>   Seems like honor among thieves or the like? Comments?
>

Hi Brian,

I use my TS-930-AT for most of my QRP work from home. I like having

a good RX with lots of filters.

And I like being able to turn up the power if I want to continue a QSO when condx dictate.

No mater what you do, someone could complain. What is to keep you from using a QRP rig into amps?

People who are going to cheat, cheat! Those that don't, don't!

I've got a lot of better things to do than worry about what others might think if I do this or that!! I just do things so that I can sleep at night.

Isn't there a saying from the good book about ....'to your own self be true'......??

Enjoy, cul,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: TMOLL@aol.com
Subject: [16157] Re: QRP Awards?
Message-ID: <970331122439_1218997842@emout15.mail.aol.com>

Ron, KU7Y recently stated:

<< People who are going to cheat, cheat! Those that don't, don't!

 I've got a lot of better things to do than worry about what others
 might think if I do this or that!! I just do things so that I can
 sleep at night. >>

You got that right Ron. There is no end reward in getting these certificates, awards, recognition, etc. other than the personal satisfaction one derives from the effort in accomplishing them and the skills and knowledge gained in that pusuit. If anyone "achieves" a qrp award or any other award via cheating, then they have to live with the decision to have done so.

Tom Moll, NoBS

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Jim Bennett <jbennett@ebmud.com>
Subject: [16174] Re: QRP Awards? (long)
Message-ID: <334006F9.122D@ebmud.com>

Just had to put in my 2 cents worth on this one...

Yes, I'm one of those folks who operates a "big" rig at the QRP level. I use an IC-775DSP cranked way down. Used it QRP in the past ARRL Sweepstakes
contest. Never ONCE went above 5w with it, even though it is easily capable of 210+ watts output. Even worse, I've got an SB-220 KW amp sitting next to it that hasn't been turned on in many months. I'm sure there are some (from the dark side?) who claim QRP in contests but run at much higher power levels. Who are they cheating? - themselves, if you ask me. But, I can't control their actions. I can only go by the "rules" and know that what I succeeded in doing I did fairly. 'Nuff said...

As for the QRP/QRO thing - Yes, QRP is fun. I recall the first time I worked a guy from WA state who was running 5w and I was cranked up to 100w on a TS-850S. I turned down the power and had a real nice contact 2xQRP. Then came the article on the QRP rigs in QST a while back - I was hooked! Been QRP ever since. Built one of the early 38 Specials and now use it on 30 meters instead of the '775. But, am I totally against higher power? Not at all - if the instance warrants it. Last night on 80 meters was a perfect example. I was using the '775 at the 5w level and having an enjoyable QSO with a YL in Southern California. She was using a TS-850S at 100w. The QSO proceeded fine for about 30 minutes when the band started getting crummy. Her sig dropped down fairly low, but I was still able to copy. She was having real problems copying me. So - was I about to let the QSO end before we were done talking about everything we had on our minds, just so I could stay QRP? Not a chance. I did the unimaginable. (You might not want your kids to read the following....) I turned up the power to 100w. :-(Yes, Father, forgive me for I have sinned... But I was able to complete the QSO, which by the way turned out to be one of the most enjoyable I've had in a long time. Will I keep the power level at 100w? Not a chance! It'll be back to 5w or less next time the rig goes on the air. Do I feel guilty about my "indiscretion"? Nope. I think the previous scenario pretty much fits the description of QRP'ing - using lower power to make contacts where higher power is not necessary. Not: "using lower power even if it means not being able to communicate!"

Jeeze, what got me going like that? Back to work Jim....

Jim Bennett / W6JHB (jbennett@ebmud.com)
Supervising Systems Programmer
East Bay Municipal Utility District
Oakland, CA 94607
voice: 510.287.0224 / fax: 510.287.0373

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Bill Morris Denton <bdenton@tenet.edu>
Subject: [16145] Re: QRPers @ NAB in Vegas
Message-ID: <Pine.OSF.3.91.970331094630.28857B-100000@beall.tenet.edu>

Not going to be able to make it this year.

Bill, W5SB   CE SBISD ITV dept Houston.(ITFS)

On Thu, 27 Mar 1997, Grover Cleveland wrote:

> There are surely a few of you going to the Broadcasters' Mecca in two weeks.
> Let's get together. Write to me.
>
> Grover
> K7TP
>
>
>
>

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Dean T. Miller" <dtmiller@dsmnet.com>
Subject: [16189] Re: T2FD
Message-ID: <9703312142.AA08608@dsm7.dsmnet.com>

Hi Tero,

> I'm planning to build T2FD antenna for 160m-10m. But how to
> calculate the dimemensions and the value of terminating resistor?

Let's get this T2FD done with, once and for all.

You can think of the antenna as a terminated transmission line with a
wide place in the middle, or a squashed, shortened rhombic (which is
also terminated).

The terminating resistor is 4/3 of the transmission line impedance. That is, if you use a 300 ohm line, the resistor is 400 ohms (390 is the closest standard value). 450 line needs a 600 ohm resistor.

The configuration of the antenna is a wide-spaced, center-fed folded dipole with the terminating resistor placed in the center of the 'outside' leg of the antenna, opposite the feedpoint.

The total length of wire on each side of the feedpoint to the resistor is 100,000 / f (in kHz) meters. Mult by 3.28 for feet. The spreader distance is 3,000 / f.

For 7 MHz (7000 kHz) you should get a wire length of 14.3 meters (46 ft, 10 in) and a spread of .4 meters (1 ft, 5 in).

Neither the actual wire length nor the spread distance is critical since this is a wide-band antenna (4:1 ratio) due to the termination -- but the wire should be the same length on each side of the feedline/terminator. An antenna cut for 7 MHz works fine at 3.5 MHz and 28 MHz (and everything in between).

I'm about to build a portable T2FD out of 28 gauge wire and soda straws with a 2 watt terminator (cut for 20 meters). I'll find out how well it works in a week or so when I get the time to try it out (BTW, I'm using a T2FD now that's cut for 40 meters).

-- Dean -- from Des Moines (KB0ZDF)

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Cecil A Moore <Cecil_A_Moore@ccm.ch.intel.com>
Subject: [16159] Re: Unbalanced Tuners with Balanced Feedlines

From: Bob Kellogg <ae4ic@nr.infi.net>
>I've been testing tuners for efficiency, and in the process have
>discovered that baluns are sometimes the cause of some losses.

Hi Bob, the guys who say their sytems "work great" even though the configuration is sub-optimal could have just been lucky and accidentally stumbled on a combination that works well. OTOH, some of them are, no doubt, just fooling themselves. My antenna system worked great and after I improved it, it worked mo greater.

>Baluns have a design impedance, and they are most efficient at that
>impedance. Unfortunately, when we use them around Antenna tuners,
>they are usually seeing something other than their design impedance.

Answer the question, what's the difference between air and ferrite
and we will have a good idea of the potential pitfalls of ferrite
based baluns. And please don't confuse the characteristics of
ferrites with the characteristics of air, iron, or powdered iron.

It is a myth that moving the balun from the output of an unbalanced
tuner to the input causes less stress on the balun. Roy, W7EL, has
proved it mathematically and here's his quote:

"If you haven't already done so, you might download IBALUN.TXT from
ftp.teleport.com/pub/vendors/w7el, which explains why a current balun
placed on the input side of an unbalanced tuner has the same effect on
balance as one placed on the output side."

```
           /---A---tuner---C-------
 xmtr--balun         |
           \---B-----G-----D-------
```

If the currents at C and D are not balanced, the system is not balanced.
If the currents at C and D are balanced then, because of the phase shift
through the tuner, the currents at A and B are unbalanced. So the balun
sees the same amount of unbalance whether it is at the tuner input or
output. Nothing's changed except the tuner chassis is RF hot. A balanced
tuner puts the same amount of phase shift in each side and therefore,
does not have the above problem.

73, Cecil, W6RCA, OOTC

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: Cecil A Moore <Cecil_A_Moore@ccm.ch.intel.com>
Subject: [16156] Re: Using an Unbalanced Tuner with a Balanced Feedline

>From: "Dean T. Miller" <dtmiller@dsmnet.com>
>Do you know if a balun is something other than a wideband
>transformer? Dean -- from Des Moines (KB0ZDF)

Hi Dean, a typical balun is a wideband transformer at its
design load. Away from its design load, it becomes narrow
banded or no balun at all. My Amidon HBHT200 is broad-
banded only with 200 ohms resistive at the output. That's
why it only ever sees 200 ohms in my antenna system. When
I first installed it, it was seeing 2000+j2000 on 75m and
was 2 'S' units down from my present antenna system.

73, Cecil, W6RCA, OOTC

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Dean T. Miller" <dtmiller@dsmnet.com>
Subject: [16188] Re: Using an Unbalanced Tuner with a Balanced Feedline
Message-ID: <9703312142.AA08616@dsm7.dsmnet.com>

Hi Cecil,

> Hi Dean, a typical balun is a wideband transformer at its
> design load. Away from its design load, it becomes narrow
> banded or no balun at all. My Amidon HBHT200 is broad-
> banded only with 200 ohms resistive at the output. That's
> why it only ever sees 200 ohms in my antenna system. When
> I first installed it, it was seeing 2000+j2000 on 75m and
> was 2 'S' units down from my present antenna system.

So, a balun is just like any other transformer -- designed to match specific impedances at specific frequencies. Sounds reasonable to me.<g>

What we need now is an auto-antenna tuner that switches balanced transformers.<Big Grin>

-- Dean -- from Des Moines (KB0ZDF)

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [16122] Re: WIMPS
Message-ID: <199703310449.EAA20970@chuck.dallas.sgi.com>

Mark et.al.,

One of things that I do, being a dweeb and all that stuff, for all my contacts is that keep my log in ASCII format.

Here is the scenario. I am using UNIX as the operating system on a workstation, not a laptop or PC clone. I thus can use all the neat commands from UNIX to get the information that I want.

Each line of data (which can extend quite a bit past 80 characters) has:

DATE:START:END:STATION:HIS:MY:FREQ:CW:PWR:COMMENTS:WPM:QSL:DIST:COMMENTS

DATE I put in format of 970330 for March 30. I can easily sort this way.

START:END are obviously the start and ending times in UTC

STATION is his/her call

HIS is his/her RST

MY is my RST

FREQ is frequency worked

CW is CW

PWR is power level

COMMENTS is his/her name and QTH only (see next COMMENTS)

WPM is code speed

QSL is blank until I send a card, then I put S/ and upon receipt
of card I change this to S/R

DIST is great circle distance from either CALLS2DIST program
on LeHigh.EDU server or from C program and using Atlas for DX.

COMMENTS is additional info on rigs, antennas, conditions, etc.

OK, after all this data is entered and kept up to date, then
periodically I run 'tbl' and 'psroff (a form of ditroff)' to
generate printed output for hard copy. I don't output the
second set of comments so at 9 point type the log comes out
nicely on 8.5x11 paper and paginated etc. Using the programs
is the reason why the fields are separated by ":" and it
allows me to not have to type in spaces and eat up space on
a line or in the file.

Now lets say I'm sitting at the desk in front of the rig and
I call CQ and say KQ0I comes back to me. While you are coming
back I reach over to the keyboard and type

wrk kq0i (note all lower case letters)

I will immediately get back

KQ0I   MARK R MILBURN .   Class: E 7/26/88
        117 SE PHILIP   Born: MM/DD/YY
        DES MOINES, IA 50315   Prev: A WA0NMA

which means two things. I have the data from the QRZ CDROM database
and it shows that I have not worked you before. If I get someone like
KU7Y calling me (he was my first NV on 30M and I haven't gotten rid
of him yet) I get back output that looks like

960710:0206:0211:KU7Y:579:229:10.123:CW:0.95:Ron   - Reno,NV:20:S/R:1375

KU7Y   MONTE R STARK .   Class: E 8/14/96
        3320 NYE DR   Born: MM/DD/YY
        NEW WASHOE CITY, NV 89704

which means that I worked him July 10, 1996 and he was very very
tight on the RST report on 30M, but hey I was glad to get him. :-)
I blanked out the birthdates which will no longer be supplied by
the FCC, so will go away on the CD ROMs.

Thanks Ron. And I did get the QSL and he was 1,375 miles away.
Also note that we did this at 20wpm 'cuz the conditions were not great.
I have worked Ron since at higher speeds, it didn't show up above
'cuz I limited the search to last year.

But wait kids, that's not all. Today only; operators are standing
by. I have another script for the C-Shell that goes and runs through
the entire online log and breaks out the data by bands. So that I get
a log for each band, states worked for each band, and the number of
states confirmed for each band, and the number of QSLs sent and the
number received.

Another script gets all the contacts for each band, sorts the distances,
and produces plots for distances vs. time and a histogram of number of
contacts vs. distance. Later this week I'll put some on the web page.
I used these at Dayton to illustrate the TMPS results that I got.

Now I know that a lot of people are groaning and saying, hey this is
too much work. Not really. Once you decide on what you want to do.
For things like TMPS and WIMPS what I'll do is keep doing the same
thing except that I can run a script and find out how I am doing
by looking at only dates 970401 and later and for specific
bands.

I'm sure that others have commercially available programs around
that do just as good.

Oh, and I've had people do this to me. Ever call someone and they
come back with your name?   You know that they are sitting
there in front of a computer. I don't do that unless I have worked you.
And then sometimes I don't even do it then 'cuz I either didn't

use the computer or I forgot to look it up.

So for WIMPS I'll have entries now for 17 and 12 meters. I just
got my first contact with Cam, N6GA, yesterday on 17M using
the GM-17 at 0.95W. So I know the antenna works there. My #1
his #2 as Byron WA8LCZ beat me to the punch. Got Cam to build
one of his modules for the Sierra. How many of us have some
modules unbuilt? A bunch of us do. ;-) So as we start looking
at sunspots increasing start building those modules.

FYI
Chuck Adams K5FO CP-60 adams@sgi.com
http://reality.sgi.com/employees/adams_dallas/
WIMPS: Qs=000 30m=0 17m=0 12m=0 States=00/00/00

From owner-qrp-l@Lehigh.EDU Mon Mar 31 18:04:12 1997
From: "Len W. Touth" <len@infinet.com>
Subject: [16136] Re: X Y Z's of Oscilloscopes
Message-ID: <199703311334.IAA04777@mail1.infinet.com>

I ordered this from Tek 1 month ago -

As an FYI - the book is no longer in print, and Tek will send you a disk
instead.

Best 72/3
Len
KG8SF
len@infinet.com   KG8SF@key.com

QRP-L # 841   CQrp # 2   ARCI # 9025   FISTS # 2134

    HF Digital Communications - CW/Pactor/G-Tor/RTTY/Amtor
       CHARTER MEMBER - THE COLUMBUS QRP CLUB - *CQrp*
           Web Page: http://www.infinet.com/~len
 QRP Homebrew Rigs = OHR 400, S&S TAC-1, NORCAL 38S, SWL GM-15,
        Kanga Any Band Xmitter, Bare Essential 50c5 Xmitter
